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1885

TWENTY-FIFTH ANNUAL REPORT

—OF THE—

BROOKLYN

Park Commissioners

—FOR THE—

YEAR 1885.

—...—

Brooklyn:

PRINTED FOR THE COMMISSIONERS.

1886.

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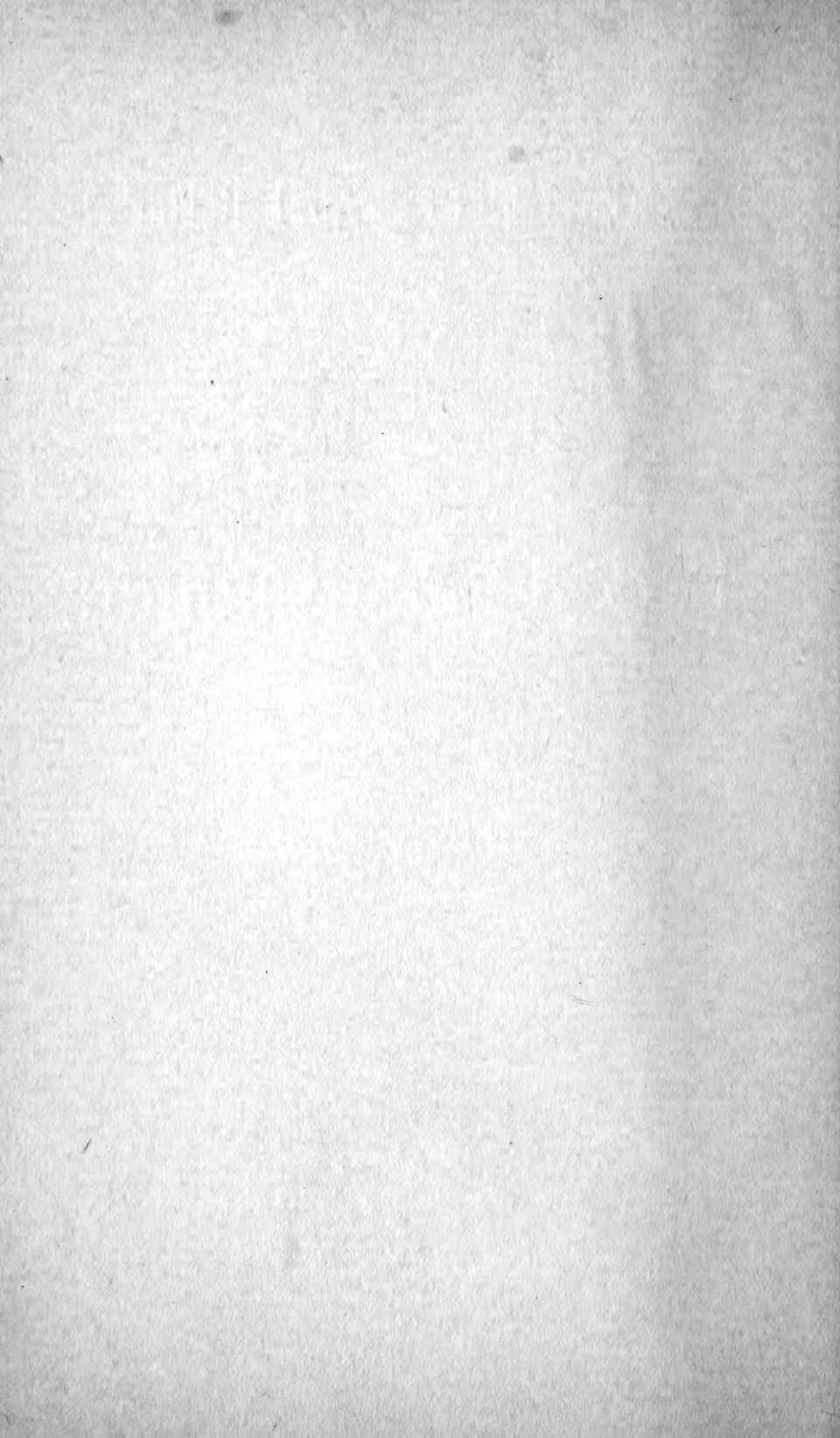
YEAR 1885.



Brooklyn:

PRINTED FOR THE COMMISSIONERS.

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COMMISSIONERS AND OFFICERS.

COMMISSIONERS:

JOHN GIBB,	ANDREW DOUGHERTY,
THOMAS C. SMITH,	GEORGE W. CHAUNCEY,
GEO. W. ALEXANDER,	LEANDER WATERBURY,
ROBERT B. VAN VLECK,	THE MAYOR, <i>ex-officio</i> .

OFFICERS.

President :

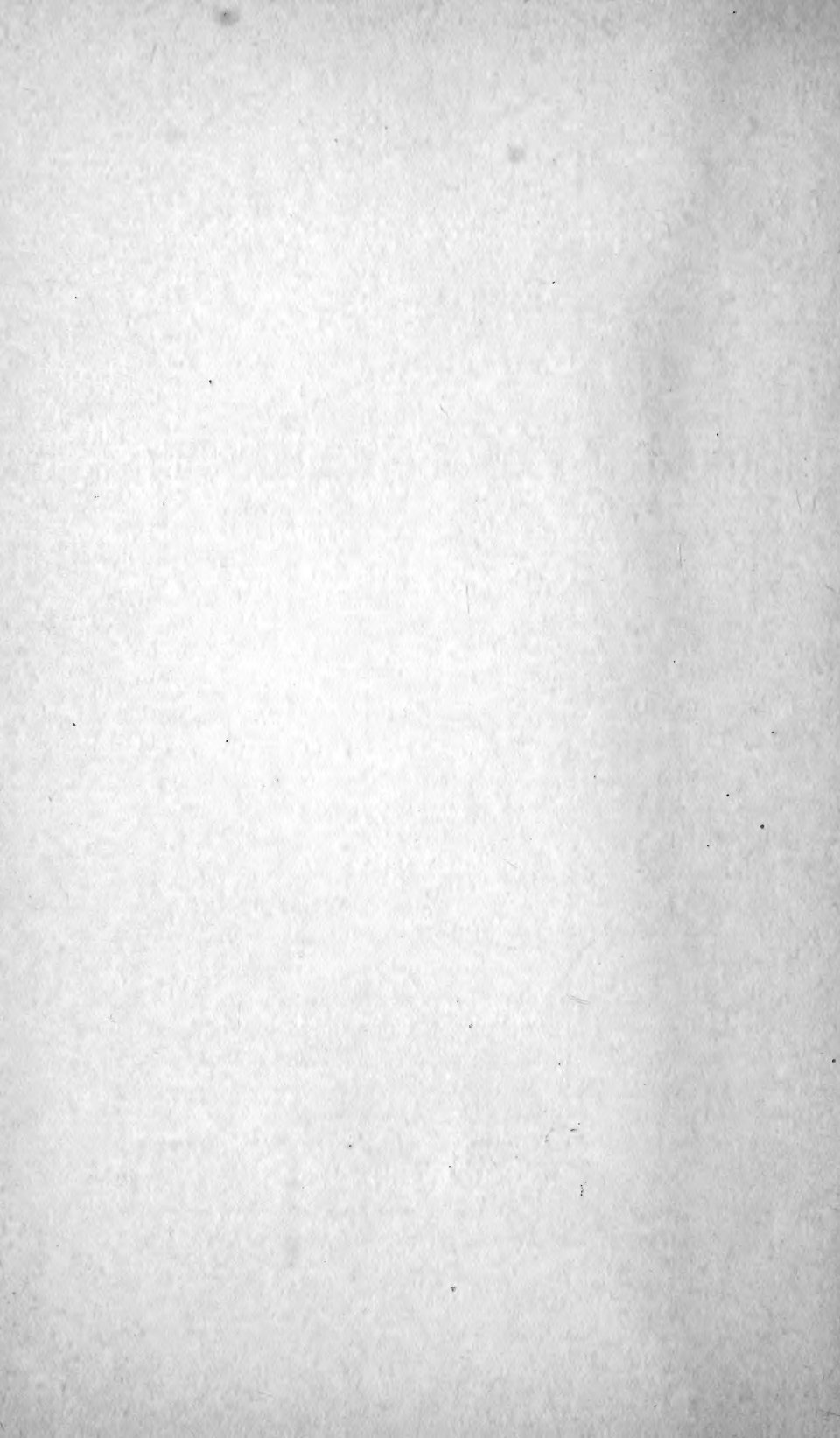
JOHN GIBB.

Secretary :

ANDREW A. SMITH.

Chief Engineer and Superintendent :

JOHN Y. CULYER.



REPORT

OF THE

Brooklyn Park Commissioners.

To the Honorable the Mayor of the City of Brooklyn :

SIR :

The Brooklyn Park Commissioners beg leave to submit herewith their annual report for the year 1885.

The accompanying financial statements represent the several amounts of money which were appropriated for their use during the year, together with the details of its expenditure.

The report of the Chief Engineer and Superintendent furnishes the details of the work, together with such other information pertaining to the parks, &c., as is likely to prove of interest to the public.

The Commissioners have observed with satisfaction the increasing interest in the parks and of their appreciable influence upon the value of the city at large. It is not without solicitude, however, that they have sought to administer the duties imposed upon them by law with the means which, from careful observation, they believe to be inadequate for the requirements of the work.

In this connection the Commissioners submit for your information a series of estimates which have been prepared by the

Chief Engineer and Superintendent, under the direction of a committee of this Board, with their report thereon, and these are herewith submitted for the information of the public.

The Commissioners beg leave to recommend that legislative authority be sought for to transfer the control of Ninth avenue and Fifteenth street, at present vested in the Brooklyn Park Commissioners, to the care of the Department of City Works, with the provision that authority over the park sidewalks and the location of railroad tracks on these avenues shall remain in the hands of the Commissioners. They further suggest that consideration be given to the needed repairs of Flatbush avenue from the Plaza to the city line, and that provision be made for lighting it with gas or electric lights.

The condition of the streets and avenues surrounding the park within the city limits and the large increase in their use by the public, would justify their improvement.

The Ocean Parkway and Concourse at Coney Island are important institutions to our citizens, who hold large residual interests in them. It is very desirable that these should be liberally maintained and preserved in their best estate.

They also recommend the completion by suitable grading, paving and planting of the Plaza streets which form the boundary of the Plaza, and which are considerable and important public approaches to the park.

The general growth of the neighborhood upon the west side, and the progress of valuable private improvements adjacent to the West Plaza street, particularly, would seem to warrant the carrying out of these improvements.

In the face of difficulties which existing laws pertaining to improvements of this character impose upon the city at present, it would be well to seek such amendments of them from the Legislature this winter as would enable the city to exercise its discretion in the matter, and at the same time to modify the law under which funds for the parks are provided, as that the determination of the amount of money to be appropriated

by the city for the maintenance of the parks shall be left to the discretion and authority of the Board of Estimate, in harmony with the general policy which pertains to other departments of the city, and according to the conditions of the city's obligations and ability.

In the matter of the east side lands, the Commissioners have been estopped in any action on their part looking to a further sale of the property owing to legal technicalities that have been raised in issue as to title, &c. By agreement of counsel representing both interests, that of the purchaser and of the city, the questions were argued at General Term of the Supreme Court, Judge Pratt presiding, who rendered a decision upon all the questions raised in favor of the city. The case was by further agreement taken to the Court of Appeals, where a final decision is expected to be obtained at any time. If the favorable decree of the General Term of the Supreme Court is confirmed, as is anticipated, it is believed that there can be no further legal interference with the final disposition of this property. The commissioners, in common with many of our citizens, share the belief that the earliest favorable opportunity should be taken advantage of to renew the sale of the remaining portion of these lands.

Respectfully,

JOHN GIBB,

President Brooklyn Park Commissioners.

ANDREW A. SMITH,

Secretary.

Financial Statement for the year 1885.
CITY.

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REPORT OF THE

<i>Certified to City Auditor:</i>		MAINTENANCE OF PARKS.	
Expended for labor, keepers, salaries.	\$103,281 88	Appropriated for Maintenance of Parks.....	\$135,000 00
" music.....	1,920 00		
" gas.....	1,185 13		
" insurance.....	196 84		
" supplies.....	28,416 15		
	<u>\$135,000 00</u>		<u>\$135,000 00</u>
<i>Certified to City Auditor:</i>		CONSTRUCTION OF ERECTIONS AND IMPROVEMENTS IN PROSPECT PARK.	
Expended for walks.....	\$4,106 25	Appropriation for construction of erections and improvements, &c..	\$10,000 00
" lumber.....	1,730 59		
" gravel, &c.....	1,610 00		
" structures repaired...	669 65		
" labor.....	1,883 51		
	<u>\$10,000 00</u>		<u>\$10,000 00</u>
<i>Certified to City Auditor:</i>		MAINTENANCE OF EASTERN PARKWAY.	
Expended for labor and keepers	\$2,675 41	Appropriation for Eastern Parkway Maintenance	\$5,000 00
" supplies	2,324 59		
	<u>\$5,000 00</u>		<u>\$5,000 00</u>
<i>Certified to City Auditor:</i>		MAINTENANCE OF OCEAN PARKWAY.	
Expended for labor and keepers....	\$8,262 76	Appropriation for Ocean Parkway Maintenance	\$12,500 00
" supplies.....	4,233 49		
" taxes	3 75		
	<u>\$12,500 00</u>		<u>\$12,500 00</u>

Financial Statement for the year 1885—Continued.

COUNTY.

MAINTENANCE OF CONCOURSE—CONEY ISLAND.

Expended for labor and keepers.....	\$4,235 00	Appropriated by the Board of Super- visors of Kings County and received from the County Treasurer	\$5,000 00
“ “ repair of walks.....	500 00	Aquarium rental.....	500 00
“ “ supplies.....	765 00	Reserve from 1884.....	3,000 00
“ the reserve of 10 per cent.	3,000 00		
from 1884.....			
	<u>\$8,500 00</u>		<u>\$8,500 00</u>

MAINTENANCE AND CARE OF PARADE GROUND.

Expended for labor and keepers....	\$3,459 07	Appropriated by the Board of Super- visors of Kings County and received from the County Treasurer	\$3,500 00
“ “ supplies	40 93		
	<u>\$3,500 00</u>		<u>\$3,500 00</u>

Your Committee, acting in conjunction with the chief engineer and superintendent, on the condition and essential needs of the parks, beg leave to

REPORT :

That they have given the matter intrusted to them thorough and careful consideration.

As the result of their deliberations, they herewith submit their report with accompanying estimates.

First, as to Construction—There appears a considerable extent of unimproved and also unfinished areas—notably the Plaza street, and that portion lying between Third and Ninth streets—on the Ninth avenue side. There is as well the requirement of structures which, if provided, would inure to the comfort and safety of visitors.

Second, as to Reconstruction—The free and continuous use of the parks and parkways by the public, since their completion, has worn out a considerable portion of the original plant; while, by reason of the limited appropriations for maintenance of the same, they are at present in such condition that unless immediate relief is provided the outlay required for the preservation will be largely in excess of that which a present judicious expenditure could restore and perfect.

A considerable area of the walks are in need of immediate repair. The same is true of the structures. Then, the plantations, provided in part for immediate effect, urgently need attention, especially the preservation of such as are not already past recuperation.

A large number of trees on the parkway should be replaced by vigorous substitutes, and the remainder should have ample sustentation.

Furthermore, your Committee are of the opinion that an annual appropriation of \$197,500 for maintenance, with \$50,000

per year, for a term of ten years, for construction, would enable the Commissioners to place the park and parkways in the condition contemplated in the detailed reports.

In the matter of Ninth avenue and Fifteenth street, your Committee are confident that the park and the adjacent properties would be permanently benefited if these streets were improved—especially the former—and that its substantial improvement would hasten the building up of the properties lying along the west side of said avenue.

Finally, it is the deliberate judgment of your Committee that the interests of the city and of the contiguous property owners would be subserved through a Legislative Act, which would transfer Ninth avenue and Fifteenth street from the custody of the Park Commissioners to that of the Department of City Works.

Respectfully submitted.

ROBERT B. VAN VLECK,
LEANDER WATERBURY,
THOMAS C. SMITH,
JOHN Y. CULYER.

CONSTRUCTION.

Of the work left unfinished at the time of suspension in construction work twelve years ago the following principal items are enumerated, with estimated cost of their completion. The principal incompletd area is that which lies between Ninth avenue and the west drive from Third street to Ninth street. This contains about 16 acres.

	Alternate Estimate.	Alternate Estimate.
In carrying out the design, this will call for about 4,000 feet walks averaging 12 feet in width, or 48,000 square feet superficial, estimated to cost for grading and superstructure as follows:		
With concrete superstructure walks, 12 feet wide at 16 cents.....	\$7,680	
Drainage and silt basins.....	2,500	\$2,500
Grading and surface treatment, including planting.....	7,000	7,000
Branch drive 2,000 feet at \$2.00 per lineal foot..	4,000	4,000
Miscellaneous, such as drinking fountains, lamps, setting back iron fence on permanent line of Ninth avenue.....	350	350
The area adjoining the foregoing and extending along Ninth avenue and Fifteenth street, between Ninth avenue and the west drive from Ninth street to city line on Gate 5, has only been partially worked over. There are 5,600 feet of walk upon which the superstructure is yet to be placed. This is.....	21,530	13,850
Estimated at 16 cents per square foot superficial for concrete.....	10,752	
The slope along Fifteenth street particularly is in an unfinished condition in part. The planting over this area is also incomplete. The grading, soiling and planting is estimated at..	3,000	3,000
Water service, drinking fountains, &c.....	500	500
Within this latter area are included the circular entrances, one at the junction of Ninth avenue and Fifteenth street and the other, city line or Gate 5. The former is 300 feet in diameter; and both being under the control of the Park Commission will, when improved, be done at their expense. The cost is estimated as follows:		
Circular curb.....	750	750
4,500 square yards of paving, either of granite blocks or construction similar to Park roads at \$3 per yard.....	13,500	13,500
Drainage.....	500	500
For similar work on the smaller circles at the city line, Gate 5:		
Circular curb.....	450	450

	Alternate Estimate.	Alternate Estimate.
2,500 yards paving at \$3.....	\$7,500	\$7,500
Planting (street trees).....	200	200
Drainage.....	500	500
The work on the upper surface and southerly slope of Lookout Hill to the lake line extending from the west drive near Gate 5 to the temporary bridge or new bridge site is generally incomplete. The existing excavation between the hill and the lake originally supplied gravel for the construction of the park drives along the Coney Island road and Franklin avenue sides and served economical purpose. The filling and grading of this area in addition to working over the whole area of 17 acres, yet unfinished, including drainage, but exclusive of the walks and planking, will cost about....	10,000	10,000
3,500 lineal feet walk, or 42,000 square feet superficial concrete at 16 cents, walks 12 feet wide.....	6,720	
Planting.....	1,000	1,000
The next important unfinished area is the Willink entrance neighborhood on the east side of the park between the drive and Ocean avenue and extending from the Willink entrance proper to the Irving statue, and covering in all about seven acres. For the grading and surface treatment it is estimated it will cost.....	3,000	3,000
1,800 lineal feet of walk, equal to 21,600 square feet superficial, at 16 cents.....	3,456	.....
STRUCTURES.		
There is contemplated in conjunction with some of these unfinished areas and otherwise several structures and erections of more or less importance to the design. These are enumerated as follows, in the supposed order of their importance from the standpoint of the present.		
FIRST—The large bridge over the middle channel of the lake at a site already established near the present temporary bridge. The water walls in new foundations are already constructed. The span is 70 feet, and of height sufficient to connect the present drives on an easy grade. The bridge will cover the water way and two lines of walk. Three designs are suggested and roughly estimated as follows: The plan approved by committee, stone and iron.....	30,000	30,000
NEXT—Small foot bridge over the drive near entrance No. 5, connecting the walk system on the line of Fifteenth street with those on Lookout Hill—this would consist of a light iron structure, either a truss or suspension bridge		

	Alternate Estimate.	Alternate Estimate.
upon stone abutments, and may be estimated to cost about.....	\$5,000	\$5,000
Supplementary water service to operate ravine water courses and to improve the lake supply.....	5,000	5,000
NEXT—The hotel or refectory building at the site indicated on the map: This is a somewhat elaborate and costly idea, and with the approaches and terraces to connect it with the lower levels, may be estimated to cost from \$100,000 to \$150,000, but the first item is assumed.		
NEXT—The observatory building on the summit of Lookout Hill.....	25,000	25,000
The superstructure of the dome of the plaza fountain is a temporary one, being made of Beton Coignet, a combination of cement and gravel. It has been contemplated to make a considerable display of water at this fountain, in conjunction with the city supply, should the opportunity ever offer; \$20,000 would be required for this work—not here estimated...		
A permanent boat and skating house combined will be required. A small shelter at the Willink entrance, also additional drinking and water closet facilities at Ninth avenue and Fifteenth street entrance and at entrance No. 5, estimated at.....	20,000	20,000
THE PARK ENCLOSING FENCE OR WALL.		
The present enclosing fence was built necessarily for temporary purposes. It is now nearly eighteen years old. To replace this with a wooden railing of a somewhat more ornamental and substantial character, making provision for some display at the entrances, would average about \$1 per foot. \$23,400.....	23,400	
Total.....	\$191,758	\$139,750

The adjustment of the sidewalks might be accomplished by laying down a centre strip of flagging 10 feet wide in the centre of the walk, with borders of turf. This will require about 230,000 square feet of flagging, and estimated to cost about \$46,000. This is not included in any estimate, for the reason that this work may be done in conjunction with the future improvement of boundary streets.

RECONSTRUCTION.

In making provision for reconstruction work it is proper to consider the superficial character of the re-surfacing of our drives during the last three years ; by 1887 it will be necessary to renew a large part of the surfaces of our drives lately repaired. Provision will therefore be desirable to be made for re-surfacing, during the next two years, about three miles of drive estimated to cost \$1.50 per lineal foot	\$23,760 00
There is out of repair and necessary to be done at this time portions of the west drive between the Plaza and Lookout Hill, running parallel with Ninth avenue and Fifteenth street, about 6,000 feet of roadway. In addition to the work of re-surfacing the roadway it will be necessary to regrade portions of it over a length of about 1,100 feet. A portion of the drainage and water service will probably require some readjustment in connection with this part of the work.	
This regrading and roadwork combined will cost.....	16,000 00

BRIDLE ROADS.

There are to be repaired a little over three miles of bridle roads ; these require to be all cleaned of the stones which have worked up to the surface, and some general regrading. There could properly be expended on this work about	2,500 00
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WALKS.

There are eight miles of walks averaging 14 feet in width, not including walks contemplated but not built. Of these walks the following is their condition : Bad asphalt, 26,010 lineal feet ; passable asphalt, 10,800 lineal feet ; gravel bad and desirable to be re-surfaced with asphalt, 2,490 lineal feet ; gravel passable, 3,000 lineal feet. There are about 27,000 lineal feet of bad asphalt walks. This is equal to 378,000 superficial feet, at 12 cents per foot.....	45,360 00
There are about 3,000 lineal feet of gravel walk which should be concreted. There are 42,000 superficial feet at 15 cents per foot.....	6,300 00
Resetting blue stone tile and curb at pedestrian concourse ; labor and new material.....	1,330 00
Cleaning and repairs to drainage system.....	1,000 00
Repairs to water system—new pipe and new stopcocks.....	10,000 00
New cesspool for lake house.....	1,000 00
Flagstone on concrete walk at Willink entrance and street crossings for the accommodations of pedestrians at that entrance..	1,000 00
Lakes and water courses ; cleaning out interior water sources and repairing slopes, also repairing border of lake.....	3,000 00

PLANTATIONS.

Thinning out plantations and replanting.....	10,000 00
Re-surfacing 23,000 square yards of sod at 25 cents per yard ..	5,750 00
Top dressing portions of Long Meadow, about 10 acres, at \$70 per acre.....	700 00

STRUCTURES.

Well—Substituting brick foundation for outer wooden curb, lowering inner curb and excavation and repairs to engine house.....	\$4,500 00
Coal Shed—Repairs to pedestrian concourse, shelter and open shelter in front and painting.....	1,000 00
Repairs to farm house—horse shed, fences, dairy stable.....	3,000 00
Rustic shelters, arbors and seats about the park, including new roof to thatched cottage.....	5,700 00
Addition and repairs to Green House—New heating apparatus.....	3,000 00
Repairs to Lake House—New wharf at miniature yacht landing and new boat wharf at pedestrian concourse.....	1,500 00
Three new rustic bridges.....	1,000 00
Replacing bridge at lullwater.....	5,000 00
Repairs to temporary bridge.....	300 00
Repairs to Cleftridge arch.....	1,000 00
New music stand on present site.....	5,000 00
Repairs and painting at picnic shelter, new swings for picnic woods.....	500 00
Repairs to park fence, new posts, bottom boards, pickets, 23,400 feet at 25 cents per lineal foot.....	5,850 00
Repairs to Litchfield building.....	500 00
The following machinery will be needed in addition to our plant:	
A new steam road roller, not to exceed 10 tons in weight, for general repairs and maintenance, estimated at.....	5,000 00
Two horses for extras, at \$300.....	600 00
One cart and one-horse business wagon.....	150 00
Four hand carts at \$25 each.....	100 00
Two two-wheeled tool boxes.....	100 00
One pruning ladder and truck.....	100 00
Two sprinkling trucks, \$600 each.....	1,200 00
One water tank on wheels.....	75 00

MISCELLANEOUS.

300 new park seats.....	1,500 30
Painting interior fences, flower vases, lamp posts, flagstaffs, Carousal, plaza railing, &c.....	2,500 00
New steering gear for roller.....	500 00
Total.....	\$178 175 00

SMALL PARKS.

FORT GREENE—Readjustment of surfaces along the boundary between the properties of A. A. Low, Esq., the hospital and the County Jail, will require regrading, sodding and replanting, together with provision for drainage.....	1,000 00
Soiling and surfacing slope on DeKalb avenue between Elliott place and Fort Greene place.....	1,000 00
Replanting.....	300 00
Planting slopes facing the Gant, repairs to turf, soiling, &c.....	1,000 00
Repairing and top dressing turf of meadows, 6 acres, at \$70... ..	420 00
Additional drinking facilities.....	100 00
Repointing wall and other masonry.....	150 00
Painting arbor and shelter, also iron gates at entrance.....	500 00
Readjusting plantations.....	250 00

SMALL PARKS.—(Continued.)	
1,500 lineal feet of walk, equal to 18,000 superficial feet, at 15 cents, to be repaired with asphalt.....	2,700 00
Surfacing with Roa Hook gravel the upper plateau.....	250 00
Replanting trees on sidewalk and Gant, 30 trees at \$5.....	150 00
Grading and repairing exterior sidewalk.....	250 00
Four new lamps at arbor at \$25 each.....	100 00
CARROLL PARK.—2,100 lineal feet of walk to be surfaced, or 21,000 superficial feet at 15 cents.....	
Sodding 1,000 yards at 30 cents.....	3,150 00
Remove present shelters and substitute one building.....	300 00
Painting fence.....	3,000 00
Repairing street sidewalks.....	150 00
New drinking fountain.....	250 00
	75 00
TOMPKINS PARK.—Repairing and re-surfacing with Roa Hook gravel 65,100 square feet superficial of walk at $2\frac{1}{3}$ cents.....	
Repairs to turf and fertilizing.....	1,519 00
Planting.....	250 00
Modification of shelter building and painting.....	250 00
Repairs to present sidewalk.....	350 00
	150 00
CITY PARK.—To put this park in proper condition there ought to be expended for repairs upon walks, turf and planting fence, boundary, sidewalk, &c., about	
	10,000 00
MISCELLANEOUS AREAS.	
There are, in addition to the City Hall area, three small inclosures under the care of the Park Commissioners, and upon which they are required to expend a portion of the maintenance fund each year; this expenditure will average about \$300 per year.....	900 00
	<hr/>
	\$28,714 00

NOTE.—The sidewalk should be flagged at an expense of about \$3,000.

These areas are designated and located as follows: Cuyler park, Cumberland street and Fulton. One without designation junction of Underhill, Washington and Atlantic avenues. Zindel Park at the junction of Broadway, Throop avenue and Gwinnet street.

These expenditures like those required to be made at the City Hall are not specially provided for and are taken from the General Maintenance Fund.

EASTERN PARKWAY.—(Maintenance.)		
Labor, team work and sprinkling.....	\$3,000 00	
Supplies, gravel, &c.....	750 00	
Lighting.....	1,000 00	
Trees, replacing and planting a portion between the Plaza and Bedford avenue.....	250 00	
	\$5,000 00	
(Reconstruction.)		
General repairs to main roadway from Bedford avenue to city line.....	\$7,500 00	
Repairs to side roads.....	2,500 00	
Replanting 375 trees, boxing, &c., at \$5.....	1,875 00	
Overhauling drainage at city line and repairing washes.....	500 00	
Additional lighting facilities.....	1,000 00	
	\$13,375 00	
PARADE GROUND.—(Maintenance.)		
Labor and supplies.....	\$2,500 00	
Police.....	1,500 00	
Repairs to fence and building.....	1,000 00	
	\$5,000 00	
(Reconstruction.)		
New fence.....	\$5,000 00	
Additional water facilities.....	350 00	
Repairs and restoring present shelter for military purposes....	1,500 00	
New club house as provided for by special appropriation.....	3,350 00	
	\$10,350 00	
OCEAN PARKWAY.—(Reconstruction Work.)	Alternate Estimate.	Alternate Estimate.
Re-surfacing main road of Ocean Parkway from Manhattan Beach Railroad Crossing to the Island 18,840 feet, at \$1.15 per lineal foot. This is based on procuring gravel from the line of the road.....	21,666 00	
To purchase a superior gravel (native) would cost at the rate of \$1.35.....		25,434 00
To material for filling in to grade depression over marsh at culvert.....	2,500 00	
Repairs to bridge over Coney Island Creek.....	1,500 00	
575 trees, including planting and boxing at \$5..	2,875 00	
Paving loading stations at hydrants.....	2,000 00	
Repairs and re-surfacing side roads.....	10,000 00	
Supervision, use of water and lighting.....	2,500 00	
Total	\$43,041 00	\$25,434 00

OCEAN PARKWAY.—(Maintenance, on present appropriation.)	
Labor, including men and team on road work, care of trees and turf and sprinkling.....	\$8,000 00
Police service.....	2,200 00
Supplies.....	450 00
Percentage of cost of water supply and maintenance.....	1,200 00
General supervision.....	650 00
	<hr/> \$12,500 00
To meet in a moderate way the demands of maintenance work on the Ocean Parkway requires an annual expenditure of not less than.....	
	<hr/> \$20,000 00
CONCOURSE.—(Maintenance.)	
Labor, repairing and cleaning.....	\$2,350 00
Police.....	1,850 00
Lighting	800 00
	<hr/> \$5,000 00
(Reconstruction work.)	
Repairs to present shelters and painting.....	\$4,500 00
Repairing posts and chain	500 00
Repairing east end of Beach and Concourse.....	1,000 00
Resurfacing promenade walk on Concourse between the drive and Ocean Front 68,750 superficial feet at 15 cents.....	10,312 50
Resurfacing roadway from the road to the beach, 14,000 superficial feet at 15 cents.....	2,100 00
Increased lighting facilities.....	1,000 00
250 trees, planting and boxing, at \$5.....	1,250 00
	<hr/> \$20 662 50
NEW WORK.—(Provided for by Special Appropriations.)	
Partial grading and cleaning up of areas north of the drive....	\$4,000 00
New shelters on beach.....	6,000 00
	<hr/> \$10,000 00

GENERAL SUMMARY.

	Recon- struction.	Construction of New Work	Total.
Prospect Park	\$177,175 00	\$191,758 00	
Fort Green "	8,170 00		
Carroll "	6,925 00		
Tompkins "	2,719 00		
City "	10,000 00		
Miscellaneous Areas.....	900 00		
Plaza Street.....		44,458 50	
Eastern Parkway.....	13,375 00		
Ocean "	43,041 00		
Concourse at Coney Island.....	20,662 50	10,000 00	
Parade Ground	10,350 00		
	<hr/> \$293,317 50	<hr/> \$246,216 50	<hr/> \$539,534 00

OFFICE OF THE CHIEF ENGINEER AND SUPERINTENDENT }
PROSPECT PARK, }
BROOKLYN, December 30, 1885. }

To the Brooklyn Park Commissioners :

GENTLEMEN :

The work during the current year upon the several parks, parkways, &c., under the jurisdiction of the Brooklyn Park Commissioners, has been of a character similar to that of preceding years, and comprehended mainly such systematic maintenance as the varying seasons demanded and the means at our disposal allowed.

Sheer necessity has required the expenditure of money upon certain portions of the work, such as renewing the superstructure of the roads, walks, &c., which ought not by any fair interpretation to be included in ordinary maintenance; but the public advantages derived from these expenditures were so clearly enhanced by the work, and the work itself was so essential in its preservative character, that the doing of it was practically vital to an intelligent discharge of responsibilities resting upon the Commissioners.

Nearly half a mile of the main West Lake drive was resurfaced in continuation of similar work which had been done in the preceding seasons. The road gutters for a length of some 1,500 lineal feet were widened, and six large silt basins were constructed and connected by 12-inch pipe with the main drainage system, with the view to more thoroughly intercept the flow of water over the more steeply graded portions of the roadway. The surfacing material used for these repairs was the Roa Hook gravel, purchased for this purpose. This section of the drive, which had formerly been in bad order, was restored to good condition. There was expended upon this work about \$6,000. The grading and planting was renewed

upon the unfinished area adjacent to the entrance at Eleventh avenue and city line, and the neighborhood was considerably improved in effect. There was expended upon this \$2,200.

In the month of March the old Carousal building was removed from the children's playground to its present site in the picnic woods. This work was done at the expense of the present lessee of the Carousal privilege, and very much in the public interest. The old building erected ten years ago was at the time of its removal very much out of repair; it has been entirely restored and its facilities greatly enlarged. A considerable space under the outside platform has been utilized by the construction of over one hundred locker-rooms for tennis players, of whom there were a considerable number previously at the park without such accommodation. The use of this portion of the park for picnicking purposes and its convenience of access for young people generally, rendered this change of site a very desirable one. The excavation for the foundation of this structure and the filling in of the old one was done, in part, at the expense of the Commissioners at a very moderate cost.

An extra force was employed during the Spring and Fall months in thinning out the plantations of the park. This work comprehended the removal of dead and surplus trees and shrubs, and included such other operations in this line of improvement as seemed essential to the restoration and maintenance of this important feature of park ornamentation.

The gradual decline of the forest trees, particularly upon the park, results each year in the death of a number whose removal becomes necessary in consequence. This is more noticeable among the nut-bearing trees, which had been injured by pounding with stones at the base of the tree by nut gatherers before the land was acquired for park purposes, and the damage to bark and sap-conducting surfaces have resulted in injuries which in most instances it is believed, after careful observation, have ultimately occasioned their death. The removal of dead

and broken limbs from these trees in order to prevent accident to passing vehicles and to pedestrians, has entailed considerable work during the season.

The preservation of our forest trees upon the park is a matter of no little importance, inasmuch as they form a very characteristic feature in park scenery.

In the west woods or picnic grounds, and elsewhere, the turf has been trodden out and the earth so compacted and hardened by continuous use, as doubtless to deprive many of these trees of the nourishment through the medium of natural sources, air and moisture, which is unquestionably essential to their vitality.

The necessary removal of leaves, from the presence and accumulation of which, trees in their natural state derive material support, is no doubt equally productive of injury. The danger from fire makes this removal imperative, however, even if considerations for general tidiness, care of roads, &c., would not justify it.

To restore to portions of our already limited forest areas a desirable means of recuperation, the most radical proposition and one most thorough in its possible results, would be to sequester specific parts of the woods for a season, and work over and refertilize the surfaces.

Another means to accomplish the object, less completely however, would be to apply a liberal covering of properly selected manure about the base and over the root bed of the trees. In view of the extensive use made of the grounds for picknicking purposes and our limited means, the latter proposition could be most conveniently carried out.

During the last fifteen years a large number of the older varieties of trees have died in the park. How far it will be possible to rehabilitate this forest feature by replanting, is to a considerable extent a matter of experiment. In the growth of a forest, a great many more trees die than survive, and those that come to maturity have fought their way to a sufficient strength to command conditions favorable to their existence.

Light, ventilation and a certain amount of living room are necessary to each plant, but as our woods are quite open, and there is a considerable space here and there which was formerly occupied by trees that could now be replanted with advantage, arrangements might properly be made to supplement our woods from time to time by planting young and thrifty kindred trees. These are principally oaks, hickory, chestnut, tulip, elm, gum, maple, dogwood and some minor varieties. In a few years any considerable number of well preserved forest trees such as here are contained, to be found in the vicinity of our large cities, will come to be of more than common objects of interest, and as such, and for the purpose of instruction to the young, their continued association as a comparatively distinct feature with the varied attractions of a beautiful park, would be very desirable.

To carry out this object properly, a nursery for the propagation and development of this class of trees could be established for the purpose of supplying the necessary material.

In other plantations elsewhere, opportunities have been availed of, in the Spring and Fall, to regulate by pruning and cleaning out a great deal of the material which had become surplusage. This comprised shrubbery in variety, such as grew quickly and used therefore often for producing effects readily; together with other more substantial plants, where intergrowth had produced undesirable massiness and where valuable trees for permanent effect, had attained to sufficient individuality as to justify their stronger definition and protection. A large quantity of material has been thus taken out, great care having been exercised in its removal, and nothing was done without a purpose based upon the object and intention of the original planting. In some instances trees and shrubs have died and others have been injured beyond recovery. At these points and in cases where the planting has not been completed, it is intended to plant and to add such material as will be found to be appropriate for the locality. During the past season we have transferred from the more largely devel-

oped plantations of Rhododendrons, Kalmias, hardy Azalias, &c., a number of choice plants, to localities suited to their growth and where they were brought into public view and proved to be a source of interest to visitors. Some loss and injury is sustained each year to our flowering shrubs and plants by visitors, principally women and children, who cannot be made to realize the harm that is done by their depredations.

There are distributed throughout the plantations of the park many groups and specimens of choice and often rare varieties of deciduous and evergreen trees, both of native and foreign origin. Numbers of these have attained to an exceptionally fine state of development and individuality.

To visitors interested in a more than casual view of these or who may be desirous of more closely familiarizing themselves with the range of composition of the park plantations, some of these varieties are enumerated and their general locality designated.

LOCATION—NEAR THE MAIN OR PLAZA ENTRANCE.

Quercus Cerris pendula, or Turkey weeping oak. This tree is the only one of its kind upon the park. It is four and a half inches in diameter, twenty feet in height, and is a notable tree of its class.

Salisburia adiantifolia, the maiden hair or Gingko tree of Japan. This is one foot in diameter, forty feet high, and one of the largest in the vicinity.

Kolreuteria paniculata, or Chinese *Kolreuteria*; *Virgilea Lutea*, or yellow wood. Here are also to be found fine trees of the following variety of maples: *Acer pseudo platanus*, or sycamore maple; *Acer platanoides*, or Norway maple; *Acer saccharinum*, or sugar maple; *Acer negundo*, or ash leaved maple; *Acer rubrum colchicum*, or red maple; *Acer dasycarpum*, or silver leaf maple; *Acer Saccharinum nigra*, or black sugar maple; *Acer campestre*, or English field maple; *Tilia Americanus*, or American linden; *Ulmus campestre*, or English elm,

and *Ulmus Americanus*, or American elm ; *Betula alba*, or white birch ; *Betula alba laciniata*, or cut leaved white birch ; *Picea grandis*, or grand silver fir ; *Pinus cembra*, or stone pine.

In the vicinity of the play-ground, a short distance into the park, to the left of the main east drive, are to be found the following, all fine specimens :

Picea Cephalonica, or *Cephalonia* or Mt. Enos fir ; *Picea Nordmanniana*, or Nordmanns fir. These are both vigorous and finely marked plants, thirty feet in height. *Retinospora pisifera aurea*, or golden retinospora, eighteen feet in height ; *Sophora Japonica*, or Japan sophora ; *Pinus excelsa*, or lofty Rhotan pine, thirty feet in height ; *Fagus sylvatica pendula*, or purple beech ; *Fagus ferruginea*, or American beech ; *Magnolia acuminatata*, or cucumber tree ; *Magnolia tripetala*, or umbrella magnolia ; *Castanea vesca*, or Spanish chestnut, noticeable in spring for its long pendulous light green catkins. This tree is twenty inches in diameter and thirty-five feet in height.

In the neighborhood lying between Battle Hill, near Battle pass, and the Deer paddock are specimens of *Quercus Macrocarpa*, or large leaf Bur oak ; *Quercus Macrophylla*, or large leaf oak ; *Quercus Robur*, English oak, and otherwise known as Hernes Oak ; *Quercus Cerris*, or Turkey oak ; *Quercus fastigiata*, or Pyramidal oak ; *Tilia Europæa*, or European linden ; *Tilia Europæa Alba*, or European silver linden ; *Juglans Nigra*, or black walnut. This tree is the last of a group of old walnut trees that occupied a conspicuous site upon the high ground near the old valley Grove road, and must have been familiar to many of our old citizens before the construction of the park. In the valley grove which comprises a considerable part of the middle woods from Battle pass running south, are to be found specimens of *Betula lenta* or black birch of very large size ; *Nyssa Multiflora* ; Pepperidge, or black or sour gum ; Liquid Amber, or white or sweet gum ; *Quercus Rubra*, or red oak ; *Quercus Alba*, or white oak ; *Quercus Coccinea*, or scarlet oak ; *Acer rubrum*, or swamp maple, three feet in diameter and forty high ; *Liriodendron tulipifera*, or tulip tree.

Several fine types of this tree are to be found upon the Bridle road leading from the Nethermead arches to the farm house. They are stately and interesting specimens, with straight stems of considerable height, and although a native tree, is not very familiar to ordinary observers. Some of these are over four feet in diameter. *Castanea Americanus*, or American chestnut, of which there are several in the same locality, whose diameter at the base is over four feet.

Carpinus Americanus, or the American horn beam or iron wood. This specimen is furnished with a well developed head, which covers an area of forty feet.

Juglans Cinera, or butternut; *Carya* or hickory tree in variety, and *Cornus Florida*, or American dogwood, whose large white flowers blossom profusely in the wood.

In the neighborhood of the Pedestrian Concourse or flower garden and upon the north and south slopes of Breeze Hill, may be found the following plants, all of which are choice specimens. (The collection of evergreens among these is an especially varied and valuable one.)

Larix Europæa, or European larch; *Abies Gregoriana*, or Gregory spruce; *Abies Clanbrasilliana*, or Lord Clanbrasils—dwarf spruce; *Abies nigra*, or black spruce; *Abies orientalis*, or oriental spruce; *Picea Pinsapo*, or Pinsapo fir; *Picea Cephalonica*, or Cephalonia, or Mt. Enos fir, a very choice plant, fourteen inches in diameter, and thirty feet high.

Taxus Adpressa, or short leaved or creeping yew; *Taxus baccata*, or English yew; *Taxus baccata erecta*, or upright yew; *Taxus Canadensis*, or Canadian yew; *Taxus baccata*, or ground hemlock; *Rhododendrons* and *Kalmias*, a choice variety of well grown plants. Generally in the month of June these plants are prolific with richest bloom of varied color; *Ilex Opaca*, the American holly; *Ilex aquifolium*, or European holly; *Carpinus betula*, or European horn beam; *Picea Picta*, or Siberian fir; *Picea Nobilis*—Noble silver fir; *Picea Hudsonica*—Hudson Bay silver fir; *Cupressus*

Lawsoniana, or *Lawson Cypress*, 18 feet high; *Cryptomeria Lobii*, or *Lobb's Japanese cedar*, 20 feet high; *Cunninghamia Sinensis*, or *Chinese pine*; *Retenospora pisifera*, 20 feet high; *Ulmus Paradox fastigiata*—*Pyramidal Elm*; *Ulmus Montana Camperdownii pendula*, or *Camperdown (Scotch) weeping elm* 14 inches in diameter and less than 20 feet in height. This tree is at the turn of the walk at the north side of Cleftridge span leading from the latter to the Pedestrian Concourse, and is a curious and interesting specimen of a worked and grafted plant; *Ulmus Montana*, or *Mountain or Scotch elm*; *Ulmus Camperdownii*, or *Camperdown Elm*; *Planera acuminata*, or *Kiaka Elm*; *Acer polymorphum*, or *Japan maple*, 8 inches diameter and 18 feet high. These latter are some of the largest and finest specimens in America and remarkable for the rich crimson color of their foliage in the Autumn; *Acer pseudo platanus purpurea*—*purple sycamore maple*; *Acer Rubrum*—*swamp maple*; *Cercis Canadensis*, or *red bud or Judas tree*. The branches of this tree are covered with a profusion of purple flowers early in Spring, before the appearance of the foliage. *Tilia Europæa* *Argentia*, *European silver leaved linden*. *Taxodium distichum*, *American bald cypress*.

Upon the lower level of the Pedestrian Concourse, facing the Music Island, is to be found also a fine grove of *Platanus occidentalis* and *Platanus orientalis*, the American and eastern plane tree, fine specimens of growth and development. Upon the borders of the South Lake drive are to be found a number of the *Ulmus campestris*, or *English elm*, in a vigorous and characteristic state of development.

In this neighborhood, too, may be seen the *Fraxinus excelsa aurea*, or *golden-barked European ash*; the *fraxinus salixfolia*, or *European willow-leaved ash*; the *fraxinus excelsa punctua*, or *blotch-leaf ash*; the *fraxinus lacineata*, or *cut-leaved English ash*.

Several of the *Ulmus Americanus*, or *American Elm*, to be found upon the park, are very perfect specimens of this beautiful and graceful native tree.

These, with many other varieties of trees and flowering shrubs and plants to be found upon the parks, afford ample means and opportunity to those interested, for study and examination. To facilitate this object, metal labels of suitable size and design have been prepared, upon which the technical and common name will be legibly written, and the labels placed upon suitably selected subjects, to which free access will be afforded to all visitors.

Of a considerable area of walk surface needing repair, the thoroughfare walk running from Battle Pass to the Willink entrance junction walk, justified its selection of such as it was possible to do this season. It is one of the most considerably used lines of travel upon the park, and this was entirely relaid during the year over a length of 1,380 feet and eighteen feet in width, the whole containing an area of 25,000 square feet superficial, and cost for its restoration in bituminous concrete about \$3,600.

The work was very satisfactorily done by Mr. J. P. Cranford, of this city, and is in good condition at the close of the year. Some minor repairs were made to portions of walk at the Willink entrance and in the neighborhood of the Carousal and picnic shelter buildings. As there are several miles of walk which have been passing through a gradual process of deterioration during the past fifteen years, it will be readily seen that but little progress can be made in their repair out of our ordinary maintenance fund.

The bridle roads were more generally used by horseback riders than ever before. It is desirable to improve them, but to treat them as their importance deserves is beyond the limit of our present means.

The drainage system is in serviceable condition, but requires in keeping the pipe lines open and in cleaning out silt basins, a portion of our force almost constantly employed. While the large number of silt basins entails the use of considerable labor, their purpose is to intercept at frequent intervals

extraordinary flows of water during heavy storms, thus preventing excessive injury to the road surfaces, and also to prevent the passage of any deleterious material into the lake.

The well and water service, together with the system of distributing pipes upon the park, the parkway, and to Coney Island, have been maintained in continuous operation throughout the year, and with the exception of an occasional supply to the fountain at the Plaza furnished from the city service, has supplied all the water required for drinking and ornamental purposes and for sprinkling the drives of the park and the Ocean Parkway. By the use of this water upon the Parkway and park drives we have been enabled to maintain the roadways in good condition for travel during a greater part of the year.

From Parkville to the island the four-inch extension pipe is inadequate to supply all the water needed, as the flow through so long a distance and through a pipe of such inferior dimensions, is greatly retarded by friction; the serviceable supply, therefore, is a very limited one. To remedy this deficiency, arrangements were made during the year with Mr. B. F. Stephens, of the Coney Island water works, for the delivery and use of water from his service at the island into our line under a greater pressure, which will enable us to maintain the lower section of the Parkway in better condition than heretofore.

The park lake has been in good condition throughout the year. The appearance of vegetation in the water in the small bays near the boat-house, usually during the warmer months of the summer, has operated somewhat against the attractiveness of this portion of the lake. The plant which comprises this vegetation is a natural product of shallow bodies of water under the influence of the higher temperature of summer, and is not believed by those who have thoroughly examined the subject to be productive, over so small an area of water, of any harmful influences to health. No known experience upon the park will justify such a conclusion.

Our lake covers an area of nearly 60 acres. The supply from the rainfall is sufficient through most of the year to maintain it at a normal level. The exposure to which the surface of the lake is subjected at all seasons is of itself a means of extensive aeration. The daily evaporation also, a natural cleansing process, is, during the warm months of summer, nearly 500,000 gallons in 24 hours. The lake is not the receptacle of any impurities except such as may be carried into it by the rainfall from the surrounding turfed area, and it contains, among other varieties, a very respectable number of bass, that live, move and have their being and undoubtedly thrive there. In fact, as to the condition of this water generally, I know more than one community of considerable numbers not a hundred miles from Brooklyn whose potable water supply is inferior to that which constitutes the park lake.

While having embodied in a completed design of the park, such essential features as the lake and watercourses, the substantial effect upon the eye and mind of the visitor, naturally pertaining to associated ideas of bodies and streams of water, simulative of lakes and streams supplied from perennial sources, has not been entirely attained on the park, owing to the occasional scarcity of water during the dry weather of summer. A full lake and constantly running streams are very desirable, and would undoubtedly prove a great additional attraction, but the occasional deficient flow of water, when observed, tends to detract from the harmonizing appearance of special localities, where one looks for a more vigorous display of water to complete the picture.

With clear water from any source at our disposal, with which to maintain a supply to feed the courses through the ravines and over the falls, through the various levels towards the lake, the comforting influence of the imagination due to the presence of a vigorous flow of water through that section of the park, would work marvels upon the mind of the casual beholder.

To offset these disadvantages, which to some extent were foreseen during the early years of construction, it is proposed

to construct a supplementary service at the head of the trout pool upon the slope of Quaker Hill. From this point a running stream throughout the whole line and over the falls could be maintained during all seasons of the year.

In addition to the items of work particularly enumerated in the foregoing pages, a considerable amount of labor has been necessarily expended upon special work growing out of the park, such as the provisions for music, the annual Sunday School parade, the ceremonies connected with the Lincoln monument services, and the Martyrs' tomb at Fort Greene, Decoration Day, together with the large number of picnics, lawn tennis and other field games.

A force of laborers has also been employed almost continuously upon needed repairs of buildings, field structures, such as summer houses, bridges, fences, seats, &c. The detail is almost infinite and the expenditure attending this work has been considerable during the year. Such work attracts no special attention, but is found to be necessary, as contributing directly to the ephemeral use of the park during the season of its greatest occupation by the public. In connection with other needed work it helps to rapidly dissipate our limited means through the most exacting season, and involves the exercise of great economy during the Winter and early Spring months of the year.

The moneys appropriated for park purposes, with the exception of some minor special appropriations, is, if strictly interpreted, intended for the maintenance of those works in detail, such as structures, roads, walks, turf, plantations, drainage and water supply, that have been brought by a course of construction to an accepted condition of completion. Unfortunately, during the last fifteen years the continued use of the park has resulted in the natural and decided deterioration of many of its important constructed features, for the necessary reconstruction of which no special provisions have ever been made. The most pressing exigencies have been met from time to time, in a superficial way, by expenditures from the ordinary appropriations for maintenance.

At the earlier period, when the greater part of the park constructions had just been completed and were in good order and required comparatively little attention, this fund was a fair provision for the purpose for which it was intended by law.

That this class of work has not been more thoroughly done, therefore, has been due to the double responsibilities which have been imposed upon the Commissioners, to partially reconstruct important portions of the park which could not be longer left to deteriorate and at the same time make provision for a greatly increased public use to which the parks have been gradually, year by year, subjected.

Our appropriations applicable to the maintenance of parks aggregate \$135,000. Out of this is to be deducted about \$50,000 for the support of the keeper or police force, a service quite essential in the scheme of caretaking and general supervision. As this fund is applicable to the care of all the parks, widely distributed about the city, viz.: Prospect park, Fort Greene, Tompkins park, Carroll park, City park, City Hall, the enclosure at the junction of Cumberland, Greene and Fulton avenues, Washington, Atlantic and Underhill avenues, Throop avenue and Gwinnett street, it is possibly quite apparent that an average monthly expenditure of about \$7,000 for labor, supplies, &c., is a very moderate one. This monthly average of \$7,000 is really the minimum amount needed for the least exacting month of the year, while the requirements of the spring and summer months would properly involve in reasonable expenditures the use of an amount two or three times as much.

With an increased appropriation a great many things can be done from year to year by which not alone a satisfactory restoration of many features of work can be brought about, but at the same time the comfort and pleasure of our citizens still further contributed to. The estimates which accompany the report of your committee indicate the work to be done in this connection and the amount of money that will be needed for the purpose.

PUBLIC USE OF THE PARK.

The skating season commenced on the 26th December, 1884, and extended through a period of thirty-eight days, and closed upon March 1st. With some atmospheric disadvantages due to the more proximate influences of the ocean, our citizens enjoyed nearly double the number of days of skating that were provided at Central Park. Through a greater part of this period nearly fifty acres of ice were kept in condition for use. The park lake was frequently resorted to by a large number of persons from New York to whom it proved an attraction. In addition to skating, ice boating and other sports were provided for.

The winter was a seasonable one, with frequent snow, and the exceptional facilities for sleighing upon the Park and parkways were amply availed of. The sleighing was often kept in good condition by restoring snow at intervals along the roads, whence it had drifted or blown away.

The cleaning of snow from the small parks and City Hall necessitated the employment of an additional force at frequent intervals during the winter.

On the 22d February (Washington's Birthday) the use of the Park was assigned to the Second Division N. G. S. N. Y. A series of operations simulative of movements and manœuvres upon the battle field were carried on, and were participated in by all the military organizations, comprising the Second Division, under the command of Major-General E. L. Molineux and Brigadier-Generals Christensen and Brownell. A favorable conjunction of weather, interest, and the freedom attending a holiday, had the effect of bringing together so large a concourse of visitors, estimated in numbers at 100,000, as to seriously interfere with the contemplated object. It is believed however that, from a military point of view, considerable advantage resulted from the enterprise. The ground was frozen and covered with snow, and there was no serious damage done to any part of the Park.

With the opening of Spring, the number of visitors were greatly increased, there being no period of the year so inviting or more favorable for observing the beauties and resources of the Park.

On the 24th of May the annual parade of the Sunday Schools took place upon the Long Meadow. Seating accommodations were specially provided under the shade of the trees for between 12,000 and 13,000 children and teachers; platforms and reviewing stands were erected for the use of officers and invited guests, and the North Meadow was enclosed with ropes, supported upon substantial stakes, and the field decorated with flags and bunting. The weather was very favorable, and it is estimated that about 40,000 persons visited the Park to witness the interesting ceremonies, which were gone through with without accident and to the satisfaction of all the participants. At the close of the exercises a number of the large Sunday Schools and Church organizations which had taken part in the parade, picnicked upon the Park, and were specially provided with seats, tables, water, &c., for the purpose.

On the 27th May the Lincoln Memorial Services were held at the Plaza under the auspices of the representatives of the G. A. R. of this city. The services comprised an address by his Honor Mayor Low, who presided; an oration by Mr. Joseph C. Hendrix, and the further exercises were interspersed with music and singing by school children under the direction of Professor Caswell of this city. Other ceremonies of a similar character were held at the Martyrs' Tomb at Fort Greene, platforms, seats and decorations having been provided in both instances by the Commissioners.

The picnicking season commenced on the first day of June, and continued throughout the months of July, August, September and October.

The expensive ventures, often attended with danger as well, of journeying by boat or cars with large numbers of children

to distant points in search of accommodations greatly inferior to those provided without charge at the Park, have during late years been very generally abandoned. The necessary maintenance of these grounds, which are almost continually used for picnicking during six months of the year, involves a considerable outlay for their care and cleaning, the provision of seats, tables, swings, water, police supervision, &c.; but the benefits in the way of convenience, safety and economy inheres so directly to our own people that these facilities, as a matter of good policy, should be enlarged rather than curtailed.

While the picnic grounds are always free, it is customary and often desirable to regulate their use in the general interest. This system of regulation is now very generally understood, and operates to the advantage of all concerned. The following printed forms indicate the method adopted, and their publication will no doubt prove interesting information to many who seek to use the Park in this way:

BROOKLYN, 188

To the Chief Engineer and Sup't,

Prospect Park.

SIR:—The assignment of a ground in the Park for picnic purposes is requested for the use of.....
for.....day.....188 .

Probable number in attendance, - - -

Number of permits for ice cream wagons, -

“ “ “ refreshment wagons, -

“ “ “ conveyance of children,

wagons, - - - - -

Number of pieces of music, - - - - -

Name of representative,.....

Address,.....

NOTE.—The attention of all applicants for the use of picnicking accommodations, is called to the importance of stating full particulars asked for, in order to avoid any misunderstanding.

PROSPECT PARK, BROOKLYN,.....188..

OFFICE OF CHIEF ENGINEER AND SUPERINTENDENT (LITCHFIELD MANSION.)

To M.

Your application is received for the assignment of a ground and accommodations for Picnicking purposes for the use of.....on.....
188.. Arrangements will be made for your accommodation on that date. I enclose the necessary permits forIce Cream and Refreshment Wagon ;wagon for conveyance of children and for music.

In case of postponement on account of weather or other cause, please communicate with me promptly, in order that your convenience may be studied with reference to another day.

It is understood always that there is no charge for the use of the grounds and attendance, and no fees of any kind are to be paid to any one.

Yours truly,

JNO. Y. CULYER,

Chief Engineer and Superintendent.

B. P. C.

PROSPECT PARK,
OFFICE OF CHIEF ENGINEER AND SUP'T
(LITCHFIELD MANSION).

To Park Keepers :

The.....has permission to have.....pieces of music at the Picnic in Prospect Park..... 188..

This permit is good in }
case of postponement. } *Chief Engineer and Sup't.*

B. P. C.

PROSPECT PARK,
OFFICE OF CHIEF ENGINEER AND SUP'T
(LITCHFIELD MANSION).

To Park Keepers :

Pass.....Refreshment or Ice Cream Wagon.....in and out of Park by Third street and Ninth avenue Entrance to Picnic Woods, for.....
.....Picnic.....188..

This permit is good in }
case of postponement. } *Chief Engineer and Sup't.*

The use of the meadows for appropriate field games has been more general than during any previous year. Croquet-playing, to a large degree abandoned by young people, continues to prove an acceptable recreation to a large number of adults throughout the fine weather of the year.

Tennis-playing almost reached the limit of our resources for its accommodation upon the Park during the past season. The tennis fields upon Prospect Park, Fort Greene and Tompkins Parks covered an area equal to nearly 60 acres, and comprised at times over 200 courts, a large number of which were frequently in daily use. Over 400 clubs, averaging ten members, and composed of young ladies and gentlemen, were afforded every facility for playing. Lockers were provided also for the storing of nets, clothing, &c. The turf was kept constantly in order by frequent cutting, to meet the requirements of the game; courts were marked out and maintained, and police supervision furnished.

A single tennis court covers an area of nearly three thousand square feet, and requires for the definition of its boundaries, &c., distinctly marked lines, usually made with liquid whiting, amounting to four hundred and eighty feet in length. For an aggregate of two hundred courts, these boundaries, &c., would, if extended in a single line, equal a distance of one hundred thousand feet, or over eighteen miles. These frequently, after heavy rains, were required to be entirely renewed. For this purpose thirty-four barrels or nearly twelve thousand pounds of whiting were used. There were no charges or fees of any kind in connection with these provisions. The facilities thus afforded by the Commissioners probably exceeded those for similar purposes provided by all the public parks together in the country. The Tennis season commenced on the 24th of May and continued throughout the early part of December.

The Archery grounds were maintained and made use of during the spring, summer and fall months.

Miniature yachting continued to interest many of our youthful visitors upon the Lake. The management of the boating service has been greatly improved, and the establishment of a moderate tariff of prices resulted in a more extended use of the boats for pleasure and exercise by visitors.

The Park carriage service and other privileges, together with the Park restaurants, have satisfactorily met the requirements for which they were established, and the public accommodation in this particular has been satisfactory.

MUSIC.

The first concert of the series of 1885 was provided on Decoration Day, May 30th, and continued until August 12th. Twelve concerts constituted the season. The music was furnished by Mr. Luciano Conterno of this city, who, in providing a choice, varied and acceptable programme for each Saturday, conscientiously discharged his responsibilities. The concerts were largely attended, and it is to be regretted that our means did not permit us to continue them longer.

If the money could be had, I would recommend that an additional concert be provided on Wednesday of each week, in addition to the regular Saturday concert, during the months of July and August. No better place for women and children could be found for convenient recreation during these warm months, especially to those whose means would not permit of expenditures necessary to obtain the same amount of comfort and pleasure at more distant points.

BICYCLING AND TRICYCLING.

The use of the bicycle and tricycle for recreation and exercise has considerably increased in Brooklyn. The park and parkways have afforded exceptional facilities for riding.

The tricycle as a vehicle for ordinary exercise and pleasure riding is more generally used than last season. This machine is greatly used abroad as a convenient means of traveling about the

country, and would be found very serviceable, especially for adults, for that purpose upon the park and parkways and upon the quieter roads and byways in the rural neighborhoods of the adjoining county towns.

There have been few accidents chargeable to carelessness or inexperience in the handling of bicycles, and the riders themselves, as a body, are solicitous to observe every precaution calculated to ingratiate themselves, as riders, in the good opinion of the public.

The following rules and regulations which have been approved by the Commissioners meet in a practical way all the requirements which, from my observation and experience, it seems to be necessary to impose upon riders :

RULES AND REGULATIONS

FOR

BICYCLE AND TRICYCLE RIDING

In Prospect Park, and upon the Parkways and Concourse at Coney Island.

PROSPECT PARK.

From November 1st to May 1st riding will be permitted upon all the pathways, subject to the following and such other restrictions as the comfort and safety of pedestrians may demand.

From May 1st to November 1st the pathways may be used before 10 A. M. and after 7 P. M. At other times no riding will be permitted upon the pathways, except on those south of the lake, from the Irving Statue to Gate 4, and to Lookout Hill.

The west drive, running parallel with Ninth avenue, Fifteenth street and the Old Coney Island Road to Gate 4, or the south-erly entrance, may be used at all times.

Care must be observed in crossing the plazas at the entrances to the park.

Bicycle riders must dismount and walk down Ravine Hill and Deer Paddock Hill at all times.

Tricycle riders may descend those hills mounted, provided they apply their brakes and go slowly.

No blowing of whistles or bugles will be allowed.

All riders must carry lighted lamps after sundown.

No fast riding, speeding or racing will be permitted, nor will coasting be allowed under any circumstances. This is not intended to prevent tricycle riders using foot-rests instead of pedals when applying brakes and going down hill slowly.

Keep to the right as a rule, and always be prepared to give timely warning to pedestrians.

PARKWAYS AND CONCOURSE.

Riding at will upon the ocean and eastern parkways, and the Coney Island Concourse, subject to the usual rules of the road, will be permitted at all times.

Owing to the large amount of driving upon the roadways, riders must observe great care in order to avoid the possibility of accident.

Conform generally to the rules prescribed for the riding in Prospect Park.

The foregoing privileges are subject to the following conditions :

All wheelmen will be required to register their name and address at the office of the Chief Engineer and Superintendent, Litchfield Mansion, Prospect Park, and procure a numbered badge, to be provided by the Park Commissioners, which badge shall be worn conspicuously on the left breast, and no wheelman will be permitted to enter the park or go on the parkways and concourse without such badge. They will otherwise conform to such rules and restrictions as may from time to time be established and imposed by the chief engineer and superintendent.

The New York wheelmen who hold badges issued by the Central Park Commissioners will be permitted to ride upon Prospect Park, &c., under the same conditions as govern the Brooklyn wheelmen. Visiting wheelmen may secure temporary permits to ride on the park and parkways on personal applica-

tion at the office of the Chief Engineer and Superintendent on Prospect Park. Particulars as to time and place for making application for such permits may be had at the Chief Engineer and Superintendent's office in the park.

Generally, wheelmen must avoid as far as possible all cause for complaint; they must observe due care and caution at all times, especially in the vicinity of pedestrians; they must conform promptly to all directions and cautions from the keepers and other officers of the park, and in case of accident render such assistance as may be necessary, give their name and address, or badge number, if required, and assume such responsibility as circumstances may warrant.

Special privileges, such as parades, entertainment of visiting clubs, &c., may be at all times arranged for, by timely application to the Chief Engineer and Superintendent.

The members of the Long Island Wheelmen, Kings County Wheelmen, Brooklyn Bicycle Club and Bedford Cycling Club, may co-operate in securing a strict observance of the foregoing rules and regulations in such manner as may be arranged, to the satisfaction of the Chief Engineer and Superintendent.

The object of these rules and regulations is to serve the interests of bicycle and tricycle riders generally. They have been approved by the most experienced riders, and were, in the main, suggested by the organized clubs of this city, with the view to avoid all possible opposition from the public, and secure comfortable means and opportunity for a desirable recreation.

By order of the

BROOKLYN PARK COMMISSIONERS,

JNO. Y. CULYER,

Chief Engineer and Superintendent.

Office, Litchfield Mansion, Prospect Park.

The improvements put upon the drives during the last two seasons tended to add to the facilities for park pleasure driving. Repairs to portions of the walks served the convenience

of pedestrians. The general freedom permitted to visitors to stroll over the meadows has relieved somewhat the pressure for a more general repair of our walk lines. At the Pedestrian Concourse, and upon some of the small parks there was maintained the usual display of flowers during the season. Some forty thousand plants which were propagated at the park green houses were used for this purpose. It is desirable that the variety of our material should be extended. With the means to add to the collection and propagation of new material this popular and attractive feature could be greatly enlarged in its scope and interest. We have accumulated by gift and loans a collection of tropical plants which, being displayed at the Pedestrian Concourse during the summer months, have always proved of great interest to visitors. No better opportunity can be offered for a general display, for the benefit of the public, of curious and rare plants at the park. Comparatively few people are familiar with many of these interesting types of foreign plants, and if this collection could be added to by gift or purchase it would unquestionably prove a valuable means for familiarizing the young, with classes of vegetation, with which they are not likely to come in contact under ordinary circumstances elsewhere.

The park, in fact, is already an out of door school, where, through the facilities afforded for study, the ordinary pursuit of book knowledge has been supplemented in a practical way. The engineering classes of the Polytechnic Institute and Adelphi Academy have for a number of years past made use of the park for their operations in engineering with, as I have been informed, the greatest advantage; the resources for practical demonstration and the carrying out of necessary detail work in the field being such as to have had a marked influence in the progress of this important study. The art and botany classes of these institutions and of the Packer Institute, together with classes of advanced pupils from some of our public and private schools, have also made the park a study ground. In addition to this, permits for individual use, according special conveniences and privileges to the holder, for the

study of Art, Botany, Entomology, Ornithology, &c., have been issued to the number of four hundred. The park is also a favorite resort for amateur photographers, to whom about 300 permits have been issued.

If, besides maintaining the park as a living panorama, delighting the eye of the visitor with green fields and woods, and combining in the varied scenery that "pageantry of Nature" so pleasing and restful to the eye of the beholder, it has been good policy to afford opportunity to all classes of our citizens to follow the pursuit of recreation and instruction in their own way, wherever consistent with the public interest, the Commissioners in the administration of their responsibilities, have made no mistake; otherwise, they probably stand open to conviction as to what should constitute the scope and aim to be attained in regulating the public use of the park.

SMALL PARKS.

Of the small parks of the city, Fort Greene, the largest in extent and most important, has been generally maintained through the year in better condition than last season. An increase in the keeper force has tended to relieve the park of the presence of many undesirable characters, who often sought to annoy visitors when not directly under the supervision of the keepers.

The park seems to invite by its convenience of access the pilgrimage of a number of worthless characters, whose course of life is made up of journeys to and from the county jail. They give us a great deal of trouble, and their frequent arrest imposes responsibilities upon us from which the city police should in part relieve us. If, too, the police justices were less lenient in disposing of such cases the public interest would be benefited.

During the year considerable pruning was accomplished, and the more massy plantations were reduced with general advantage. Some of the broken surfaces upon the interior walk lines were repaired at a cost of about twelve hundred dollars, but there is still a considerable portion of the walk surfaces that

need renewal. The unfinished ground along the border of the jail and hospital property presents an unsightly appearance, and the slopes overlooking the Gant and on the DeKalb avenue sides adjoining the Phoebe Mission building, require to be worked over and replanted. The conditions of these two points are due to the incomplete finish put upon these areas at the close of construction work ten years ago. This park is admirably designed to meet the requirements of a neighborhood resort, and its importance would justify the expenditure of the money needed to perfect its details and maintain it in good condition.

TOMPKINS PARK AND CARROLL PARK.

Tompkins Park and Carroll Park have received such attention and care, together with the necessary police supervision, as was deemed to be desirable and within our available means. Both of these parks are located in neighborhoods where they afford, to young people particularly, a convenient resort for recreation. With the means to perfect and refine their various details, they could be very much improved in usefulness and appearance.

CITY PARK.

The deteriorating character of this neighborhood and the growth of manufacturing interests in the locality have rendered it difficult to devise other use for this park than that of a convenient thoroughfare and as a playground for the large number of pupils from the neighboring public school. If it is to be continued as a park, its proper rehabilitation would require an expenditure for renewing the walks, planting, returfing, repairs to railing and entrance gates and the regulation of the boundary of sidewalk, not less than ten to fifteen thousand dollars.

The several small enclosures about the city, whose locality has been noted elsewhere in this report, have required an average annual expenditure of about \$250 for their care during the past season,

CITY HALL.

In the spring of this year the small turfed area on the plaza facing the City Hall was enclosed with a blue stone coping and the surrounding sidewalk regraded and the flagging relaid.

Twelve selected maple trees were planted about this area and enclosed with a circular blue stone curb. This work cost about \$3,000, and the expense was defrayed out of the Maintenance Fund of the park. This money was not properly applicable to this purpose and should have been provided for by special appropriation at the hands of the Common Council of the city. This work, though limited in its effect, has undoubtedly proved a desirable addition to the former waste of flagging.

PARADE GROUND.

The Parade ground has been used principally throughout the fine weather of the year for field games, its adaption for which, has made it the principal free resort in this vicinity. The statistics elsewhere given of this use serve to indicate its popularity and the extent to which it has contributed a desirable means of out-door sport and recreation for the young men of our city.

The military have made little or no use of the grounds during the year. The turf has been kept in good order and the necessary attendance and keepers have been provided for the grounds to assure its care and proper regulation.

A special appropriation of \$3,500, which has been provided by the Board of Estimate, will enable the Commissioners to erect a suitable building containing lockers, wash rooms, closets, &c., for the use of the young men who use the Parade Ground for various field sports.

OCEAN PARKWAY.

The repairs to the first section of the Ocean Parkway, which were made last year, enabled us to maintain the principal roadway as far as the Club House in very good condition. The

lower section, which is composed of a much finer and more sandy material, is in need of treatment similar to that of the other portion of the road. The gravel found this side of Parkville is superior for road purposes to the deposits beyond that point, and while the cost of transportation will be greater, the better quality of the gravel itself will compensate in durability for the increased difference in cost.

Some parts of the lower section are very much broken up, especially at the extreme end, where more or less of the drifting sand from the beach has blown over portions of the road and has prevented anything but temporary betterment.

The amount of money provided for the maintenance of the Parkway, nearly six miles long, if applied strictly to maintenance work even, is not enough to keep this important pleasure drive in proper condition at all seasons of the year. We can therefore spare very little money for resurfacing any considerable extent of the lower section.

Owing to the limited sustenance contained in the soil spaces originally provided for the trees, many of the trees have failed, and several hundred will be required to be replaced at the lower section, where many of them have died, while others have been destroyed by lawless people in the neighborhood. In order to revitalize a number of trees whose weakly condition suggested the need of it, a supply of manure has been worked in over the surface of the roots of such trees, with a view to their recuperation.

The very thrifty development of the maples between the Park and Parkville will necessitate in another season a thorough and systematic pruning.

The large increase in the use of the Parkway as a pleasure drive suggests the desirability of establishing some regulations as to the use of the main roadway, by traffic wagons. The heavy wagons loaded with farm produce, manure, coal and building material of all kinds, subjects the road surface to need-

lessly excessive wear, breaking it up frequently and impairing to a considerable extent its condition for light vehicular travel, for which the middle drive was specially designed. Many of the drivers of these heavy vehicles are careless of the interests of others upon the road, and are very indifferent to the possibilities of accident, especially during the crowded parts of the day. The side roads, which are the traffic roads, are in good condition for nearly the whole distance over which the pleasure-driving extends ordinarily, and these roads are generally in better condition than those of the neighborhood. It will therefore be no hardship to restrict this class of travel at times to these roads, while permitting at other times, when it is safe to do so, the use of the main road under suitable restrictions.

Accidents among riders from various causes are quite frequent, and two or three mounted officers could be employed upon the Parkway to good advantage to regulate travel.

CONCOURSE.

At the Concourse, the usual force has been employed in the cleaning and care of the promenade, drive, walk, shelter buildings, water supply, and the occasional removal of offensive debris, dead animals, &c., which have been washed upon the shore.

A force of keepers has been detailed throughout the spring, summer and fall months to regulate traffic, much of which is by public hacks. The character of these establishments, as a rule, is poorly adapted to the proper conveyance of passengers. The vehicles are disreputable, and the horses, most of them aged and decrepid specimens of that noble animal, are unfit for the burden put upon them, and daily call for the intervention of a humane and powerful representative of the Society for the Prevention of Cruelty to Animals.

Most of the drivers are ready to practice extortion upon the guileless visitor who seeks transportation over the Concourse,

while others are inexperienced boys, a number of whom last season I assumed the responsibility of preventing from operating upon the Concourse.

The settlement of the middle part of the island contains many buildings devoted to nefarious purposes and practices, upon which the authorities impose little if any restrictions. The effect has been to steadily depreciate the value and serviceableness as a summer resort of a considerable part of the island. The contiguity of two large race tracks where, during a greater portion of the year, many race horses are quartered, has had the effect of making the beach quite prominent as a horse resort. These, with the connivance of their owners, have so divided the use of the beach with human visitors, as often to monopolize it to the discomfort of the public, and while the benefits of sea bathing, which the horses undoubtedly derive, need not be absolutely denied them, it will be necessary next season to restrict the use of that portion of our Concourse to limited hours and at such times as will not interfere with its public use. During the storm which prevailed on the 24th November, the ocean face of the bituminous concrete upon the embankment of the Concourse was carried away for a length of 250 feet by 15 feet in width at the easterly end. This has been inevitable in consequence of the gradual encroachment of the water under the influence of a northeast storm, from which direction the greatest amount of damage to this shore results. The system of rectangular bulkheads or enclosed cribbing, composed principally of rough timber, which had been adopted by the Manhattan Improvement Company and Brighton Beach Railroad Company, has long tended to invite the attacks of the elements upon the easterly shore of the island, and the destruction of that part of the beach has been so general as to completely modify the configuration of that portion of the ocean front between the Oriental hotel and the Concourse property. The conjunctive effect of these artificial structures and the influence of the elements, have resulted in shifting, for the time being at least, the imminent danger of further encroach-

ments upon the face of the Brighton Beach Railroad Company property and the easterly end of the Concourse, against which no protection can be devised at this season of the year without the expenditure of a large sum of money. The plan adopted by the Commissioners ten years ago, for the protection and preservation of the Concourse embankment, was such as to afford the desired safeguard against the force of the water beating upon and over the embankment, under the influence of these heavy storms, but this structure, at the easterly end particularly, is now threatened from a direction over which we can exercise no opposing means and is likely to seriously damage our property before Spring of next year.

The value of the Concourse area to our citizens is great enough to justify a more general interest in its improvement and preservation than has been apparently manifested in the past. It is now the only considerable part of the beach to which the public can enjoy, with the desired freedom, the privilege for which, a journey to the island is mainly valuable.

For the first time an appropriation, with which it is intended to provide some needed public facilities, has been secured, through the medium of the constituted authorities, the Board of Supervisors. .

With the \$10,000 appropriated for this purpose, it is proposed to erect a comfortable and commodious shelter where women and children particularly, may spend a day upon the shore at no other expense, if need be, than the cost of their transportation to and from the Island.

In connection with this structure, it is intended to make some very simple provision for the sale of bread, crackers, sandwiches, tea, coffee, milk and fruit at very little in excess of cost price, with a view to provide persons of moderate means with facilities for needed refreshments. With a portion of this appropriation it is also intended to improve the appearance by grading and otherwise, of so much of the area north of the drive as the means will allow. The Commission-

ers have always been desirous of rendering this area more serviceable and sightly, but it was not possible for them to do so without the necessary special appropriations.

EASTERN PARKWAY.

The Eastern Parkway was quite thoroughly resurfaced with Roa Hook gravel from the Plaza to Bedford avenue during the year, and some improvements and repairs were made to the roadway, drainage, &c., of the remaining portion of the road.

A number of the trees have been destroyed by vicious persons and these should be replaced during the ensuing season.

In the month of November, twenty-three electric lights were placed upon the Plaza and along the line of the Parkway as far as Bedford avenue. This more efficient mode of lighting these thoroughfares has already proved of great advantage to the driving public.

PARK EMPLOYÉS.

The stated force of the park, including the keepers ordinarily employed during the greater part of the year, represents in numbers about 150 men. During the spring and summer months the exigencies of the work require that this force should be temporarily supplemented.

From one to three hundred men are thus employed for periods ranging from a single day to three months, and their services are dispensed with as soon as the extra work for which they have been employed has been accomplished. By reference to the tabulated list of employés accompanying this report, it will be found that the greater part of our regular force has been in the employ of the Commissioners for many years. Their long connection with the work has made them familiar with the details of park construction, and versatile in methods of accomplishing work, which justify their retention during good behavior and efficiency.

The working force is comprised as follows :

One general foreman, 1 clerk, 2 office assistants, 2 foremen of laborers, 1 foreman of carpenters, 4 mechanics, 1 draftsman, 1 skilled gardener, 1 florist, and 90 laborers of all grades, including gardeners, teamsters and ordinary laborers. During portions of the winter months a part of this force is temporarily suspended for purposes of necessary economy. All grades of the force are employed at a fixed rate per hour, and are paid monthly in cash at the office on the park. The general foreman and foremen, together with such other men as are entrusted with the direction of any branch of the work, are experienced in their several departments and have faithfully discharged the duties for which they are employed.

KEEPER FORCE.

The Keeper force is constituted as follows :

- 1 Head-keeper, or captain,
- 4 Assistant Head-keepers, or sergeants,
- 2 Station officers,
- 39 Keepers, which number includes five mounted officers.

There are also five subordinate employes, which includes a tailor and a care-taker of clothing, one janitor, one store-yard and greenhouse watchman, and two house-cleaners.

During the year there were—

Two resignations, 6 discharges for cause, 1 death, 18 appointments.

The latter appointments were made to fill vacancies which had occurred during the past two years.

Two promotions from acting sergeant to sergeant were also made during the year.

Twelve keepers were suspended for various offenses against discipline.

There were 164 arrests, the details of which are as follows :

Intoxication.....	31
Disorderly conduct	34
Reckless driving.....	3
Safe keeping	10
Pulling plants and flowers.....	13
Indecent conduct.....	9
Malicious mischief.....	2
Stealing grass.....	1
Stealing sods.....	1
Robbery.....	1
Assault.....	4
Lounging.....	14
Dogging visitors.....	2
Peddling.....	15
Vagrancy.....	13
Bathing.....	2
Trespass.....	1
Forcible entry.....	1
Firing a pistol.....	1
Throwing sticks and stones.....	5
Soliciting passengers unlawfully.....	1

The more important of these were disposed of by fine, imprisonment or reprimand by the justices before whom the offenders were cited. There were 164 accidents, some of which were of a serious nature. These are enumerated as follows :

Carriages and sleighs.....	110
Saddle horses.....	9
Bicycle.....	6
Tricycle.....	1
Skating.....	10
Coasting.....	1
Boating.....	1
Fell in the Lake.....	2
Sunstroke.....	1
Miscellaneous.....	23

One hundred and fifty persons were ejected from the Parks for minor improprieties.

Fourteen persons were taken sick ; these were cared for at the Park, and in some cases sent to their homes.

Two dead infants were found concealed in the shrubbery and handed over to the charge of the coroner.

There was one suicide and one attempted suicide. Both cases were transferred to the care of the proper authorities.

There were 50 lost children, all of whom were restored to their parents.

There were 12 Park concerts, commencing the 30th May and ending August 12th.

From January 1st to March 1st there were 36 days of skating.

Of field games on the Parade ground there were 900 games of base ball, 150 games of foot ball, 150 games of cricket, 35 games of La Crosse. There were 750 picnicking parties, to whom grounds were assigned and the usual facilities extended. Of this number there were 300 gatherings of considerable size, numbering from 150 to 2,500. These latter comprised Sunday School and Church organizations of a very considerable number of the different churches of all denominations of this city. There were 700 parties of children, to whom swings were assigned for the day on special application.

METEOROLOGY.

There will be found accompanying my report the usual meteorological statistics for the year. The formulated observations are supplied weekly to the Department of Health of this city, and serve as a medium of exchange for similar information to that Department with the health boards of all the principal cities of the Union.

Our records are frequently called for by direction of the courts to supply meteorological information in legal controversies. Some needed additional facilities in the way of instruments of a better quality, &c., as has been heretofore suggested, would enable us to extend and perfect this work, which, as its value is more widely understood and appreciated, will become more interesting to the public at large.

Respectfully,

JOHN Y. CULYER,

Chief Engineer and Superintendent.

Statement of Accounts Certified to Auditor during the year 1885.

DATE.	NAME.	FOR.	AMOUNT.
Jan. 2	Pay roll	Laborers, &c.	\$5,131 68
2	"	"	128 45
2	"	"	5,413 32
2	"	Officers and clerks, Nov., 1884	874 16
2	"	Officers and clerks, Dec., 1884	874 16
2	"	Laborers, &c.	6,351 96
2	"	"	71 65
2	"	"	207 57
7	Thomas McCann	Gravel	1,075 25
7	Peter B. Bracken	Horse Shoeing	220 00
7	Louis D. Beck	Gravel	455 30
7	John Y. Culyer	Incidental expenses	63 54
13	Stephen Stevenson	Soap	6 25
13	William Porter's Sons	Lamp supplies	18 00
13	William Berri's Sons	Carpets and mats	46 00
13	Pratt Manufacturing Company	Naphtha	48 12
13	"	"	46 26
13	"	"	41 99
13	Metropolitan Gaslight Company	Gas	34 83
13	"	"	33 43
13	Brooklyn Gaslight Company	"	34 58
13	"	"	40 32
13	"	"	38 36
13	W. B. Dayton & Son	Stone supplies	49 25
13	H. Hawkes	Plumbing supplies	45 50
13	Hosford & Sons	Stationery	2 50
13	"	"	9 50
13	Coney Island Fuel, Gas & Light Co.	Gas	16 00
13	William Bergen, Agent	Coal	326 40
13	"	"	15 30
13	Edward R. Shipman	Oats, feed and meal	81 75
13	"	Oats, &c.	129 38
13	"	Corn, feed and meal	49 80
13	"	Oats, feed and meal	78 83
13	Beers & Resseguie	Lumber	94 50
13	Knickerbocker Ice Company	Ice	10 98
13	O. W. Keenan	Kerosene oil, &c.	65 00
13	"	Glass and castor oil	3 52
13	"	Glass, putty and soap	2 01
13	"	Glass and oil	9 35
13	"	Glass and twine	11 52
13	"	Supplies	23 45
13	"	Glass and oil	27 58
13	Whitehouse & Wells	Glass and repairs to sash	40 00
13	William H. Douglas	Drugs	3 95
13	Henry Werner	Slats and stakes	120 60
13	"	Lumber	137 60
13	"	Dome sash	24 50
13	"	Stone boat	23 02
13	"	Pine	5 18
13	"	Ceiling boards	22 25

Statement of Accounts Certified to Auditor—Continued.

DATE.	NAME.	FOR.	AMOUNT.
Jan. 13	Peter B. Bracken.....	Horse shoeing.....	\$160 00
13	..	Carrots	16 00
13	Thomas McCann.....	Gravel	555 00
13	John Morton & Sons	Mortar and bricks	17 00
13	Jerome Walker, M.D.....	Medical attendance.....	19 00
13	Frank J. Cole.....	Keepers' gloves.....	37 00
13	Henry R. Worthington.....	Felt.....	11 70
13	Isaac Harris	Hauling gravel.....	1,617 62
13	..	..	2,445 38
13	Pitman & Read.....	Plastering	17 12
13	C. M. Moseman & Bro	Horse b'nkts, harness, &c.	48 50
13	..	Harness supplies	9 25
13	William Porter's Sons.....	Lamps.....	154 60
13	Hibbler & Rausch.....	Automatic globes.....	48 00
13	William Wall's Sons.....	Marline.....	7 15
13	..	Rope	4 37
13	..	Flags	18 50
20	Pay roll	Officers and clerks	874 16
Feb. 5	..	Laborers, &c.....	7,286 90
5	..	..	89 75
5	..	..	213 38
5	John Y. Culyer.....	Incidental expenses.....	70 09
5	William Bergen, Agent.....	Coal	260 10
5	..	..	10 20
5	Paul C. Coffin	Hardware	192 47
5	..	..	56 76
5	Botanic Gardens.....	Plants, &c	40 00
7	Edward R. Shipman	Oats and meal.....	82 75
7	..	Oats, corn, feed, &c	105 15
7	..	Corn, &c	45 00
9	Henry Werner.....	Walnut case	14 00
9	..	Timber	24 96
9	..	Lumber	84 00
9	C. M. Moseman & Bro.....	Harness.....	19 50
9	Doane & Wellington Mfg. Co ..	Aut'm'e lamp b'rn'rs, &c.	32 00
9	Frederick Loeser & Co.....	Muslin.....	10 88
9	Cole & Co.	Boiler supplies	8 25
9	William Wall's Sons.....	Rope, &c	6 08
9	William B. Dayton & Son	Supplies for stores.....	58 90
9	..	Store supplies.....	15 08
9	Orange Judd Company	Brown Forrestry.....	10 00
9	S. V. Plageman.....	Colic Mixture	16 00
9	Charles Zeller, Agent.....	Plants	25 00
10	Hosford & Sons.....	Stationery	2 30
10	..	..	18 50
10	..	..	11 50
10	..	..	13 00
10	..	..	1 65
10	..	..	10 75
10	..	..	2 10
10	..	Blank books	47 75
10	C. W. Keenan	Supplies	11 65
10	..	Home Light oil	14 29

Statement of Accounts Certified to Auditor—Continued.

DATE.	NAME.	FOR.	AMOUNT.
Feb. 10	C. W. Keenan	Signal oil	\$49 28
10	L. Brandeis & Son	Plumbing material	18 97
10	Brooklyn Daily Eagle	Printing	18 25
10	Metropolitan Gaslight Company	Gas	38 15
10	Brooklyn Gaslight Company .....	.. .....	30 10
10	.. .....	.. .....	43 40
10	Pratt Manufacturing Company	Naphtha	45 59
10	.. .....	.. .....	45 59
10	Janes & Kirtland	Grates	43 75
10	Gillis & Geoghegan	Labor of steam fitter	4 62
10	Union Steam Printing Est'b'mt.	Printing	4 50
10	H. Badeau, Agent	Maps	10 00
10	C. E. Sanford	Dials for register	1 25
10	.. .....	Register	100 00
10	Peter B. Bracken	Horse shoeing	105 00
10	.. .....	Cob corn	53 90
10	.. .....	Repairing harness	97 30
10	.. .....	Yellow turnips	11 25
10	.. .....	Repairing tools	51 21
10	Pay roll	Officers and clerks	874 16
Mar. 5	John Y. Culyer	Incidental expenses	56 76
5	Pay roll	Laborers, &c.	7,221 60
5	.. .....	.. .....	81 80
5	.. .....	.. .....	171 81
5	A. W. Shadbolt & Son	Wagon supplies	76 57
5	Pratt Manufacturing Company	Naphtha	43 39
5	William H. Douglas	Ether	3 00
5	Hibbler & Rausch	Automatic globes	72 00
5	Edward R. Shipman	Feed and meal	21 00
5	.. .....	Salt	4 95
5	.. .....	Oats	100 88
5	Hosford & Sons	Stationery	5 45
5	.. .....	.. .....	10 00
5	.. .....	.. .....	12 75
5	.. .....	.. .....	4 75
5	.. .....	.. .....	58 50
5	.. .....	.. .....	14 45
5	C. W. Keenan	Oil, &c.	22 50
5	.. .....	Glass	3 50
5	.. .....	Kerosene oil	14 77
5	.. .....	Home Light oil	7 50
5	Henry Werner	Pine slats	84 00
5	Metropolitan Gaslight Company	Gas	35 35
5	William Wall's Sons	Rope	10 32
5	William Porter's Sons	Lamp supplies	1 50
5	W. C. Vosburgh Mfg. Company	Gas fixtures	139 14
5	.. .....	Globes	2 00
5	Hosford & Sons	Stationery	7 25
5	.. .....	.. .....	32 70
5	Brooklyn Daily Eagle	Printing	2 00
5	Young & Elliott	Plants	8 90
5	James H. Hart	Clock	5 00
5	Frederick Loeser & Co.	Supplies	8 66

Statement of Accounts Certified to Auditor—Continued.

DATE.	NAME,	FOR.	AMOUNT.
Mar. 5	Paul C. Coffin,	Hardware	\$65 62
5	John A. Scollay,	Rep. green house boiler,	6 00
5	Guiseppi Tagliabue	Thermometer,	41 00
5	Charles Lorenz,	Tobacco,	22 50
5	Jones & Kirtland,	Iron Rods,	60 00
5	Edward R. Shipman,	Corn,	30 00
5	Stephen Stevenson,	Soap,	6 25
5	William Bergen, agent,	Coal,	360 50
5	.. . . .	.. . . .	5 10
5	Watson & Pettinger,	Lumber,	52 47
5	Beers & Resseguie, . . . . .	.. . . .	191 90
5	Town of Gravesend,	Taxes on gravel pit,	3 75
17	Pay Roll,	Officers and clerks,	874 16
April 2	.. . . .	Laborers, &c.,	7,688 91
2	.. . . .	.. . . .	106 95
2	.. . . .	.. . . .	411 12
2	John Y. Culyer,	Incidental expenses,	56 77
6	Paul C. Coffin,	Hardware,	121 50
6	Harris & Stilwell,	Ambulance service,	80 50
6	William Bergen, agent,	Coal,	250 70
6	Edward R. Shipman,	Oats, hay and meal,	156 82
6	.. . . .	.. . . .	107 50
6	Andrew A. Smith,	Office expenses,	11 32
7	Dr. Jerome Walker,	Medical services,	60 00
8	Hosford & Sons,	Indexes,	1 80
8	.. . . .	Stationery,	42 10
8	C. W. Keenan,	Kerosene oil,	14 92
8	.. . . .	Parlor matches,	7 60
8	.. . . .	Alcohol,	5 40
8	.. . . .	Glazier's points, &c.,	5 40
8	C. M. Moseman & Bro, . . . . .	.. . . .	6 00
8	Union Steam Printing,	Printing,	2 50
8	Pratt Manufacturing Co.,	Naphtha,	42 92
8	William Wall's Sons,	Canvas,	6 18
8	A. V. Benoit,	Tracing cloth,	18 10
8	Harry Werner,	Hickory,	26 47
8	.. . . .	Pine,	2 40
8	Harry R. Worthington,	Rubber packing,	24 00
8	Brooklyn Gas Light Co.,	Gas,	37 20
8	.. . . .	.. . . .	35 70
8	.. . . .	.. . . .	22 80
8	.. . . .	.. . . .	23 10
8	Metropolitan Gas Light Co., . . . . .	.. . . .	32 20
8	.. . . .	.. . . .	14 88
8	Union Steam Printing Est'bm't., . . . . .	.. . . .	18 00
8	Richard Dudgeon, . . . . .	.. . . .	18 00
8	L. Brandeis & Son,	Basin,	1 40
8	C. W. Keenan,	Castor oil,	1 00
8	.. . . .	Glass,	34 80
8	Richard Dudgeon,	Hiring hydraulic jacks,	24 00
8	Metropolitan Gas Light Co.,	Gas,	21 00
8	Brooklyn Daily Eagle,	Printing,	13 75
8	Metropolitan Gas Light Co.,	Gas,	22 58

Statement of Accounts Certified to Auditor—Continued.

DATE.	NAME.	FOR.	AMOUNT.
April 8	C. W. Keenan.....	Home Light oil.....	\$7 50
8	.. .. .	Alcohol, &c .. .	13 01
8	Peter B. Bracken.....	Horseshoeing.....	157 50
8	Cole & Co.....	Boiler supplies.....	36 50
8	J. S. Brooks.....	Safe .. .	65 00
10	Prospect Park & C. I. R. R. Co..	Excursion tickets.....	50 00
21	Pay roll .. .	Officers and clerks.....	874 16
May 5	.. .. .	Laborers, &c.....	10,433 22
5	.. .. .	.. .. .	1,022 00
5	.. .. .	.. .. .	943 65
7	John Y. Culyer.....	Incidental expenses.....	95 54
7	J. P. Cranford.....	Concrete walks.....	163 75
12	.. .. .	.. .. .	4,106 25
12	L. F. Lewis.....	Horses .. .	650 00
12	Paul C. Coffin.....	Hardware.....	1,009 62
12	H. Hawkes.....	Plumbing supplies.....	568 65
12	.. .. .	.. .. .	315 85
13	John Gallagher & Bro.....	Carriage hire.....	26 00
13	Henry Werner.....	Balusters and pine.....	31 50
13	.. .. .	Pine mouldings .. .	20 70
13	.. .. .	Posts, mouldings, &c.....	35 19
13	.. .. .	Mouldings.....	13 50
13	E. W. Gifford.....	Trees.....	187 50
13	Edward R. Shipman.....	Oats.....	135 00
13	.. .. .	Hay and meal .. .	74 66
13	.. .. .	Hay, corn, &c.....	124 77
13	W. B. Dayton & Son.....	Stone supplies, &c.....	48 28
13	James McLeer, P. M .. .	Postage stamps.....	20 00
13	Jones & Kirtland.....	Settee legs.....	529 83
13	.. .. .	Roller sections.....	184 00
14	Pratt M'f'g Co.....	Naphtha.....	43 10
14	Hosford & Sons.....	Stationery.....	6 50
14	C. M. Moseman & Bro.....	Harness.....	13 75
14	Hosford & Sons.....	Book for Auditing Com..	6 75
14	Beers & Resseguie.....	Lumber.....	3 00
14	Peter B. Bracken.....	Horses.....	1,150 00
14	Brooklyn Gas Light Co.....	Gas.....	31 35
14	C. C. Martin.....	N. Y. & B. B. tickets...	15 00
14	Bruce & Cook.....	Copper, &c.....	5 04
14	Fred Loeser & Co.....	Muslin.....	6 29
14	Bruce & Cook.....	Pig lead.....	11 96
14	C. M. Moseman & Bro.....	Collars .. .	13 00
14	Wm. H. Douglass.....	Drugs and medicines.....	1 85
14	Hosford & Sons.....	Stationery.....	30 65
14	Wm. H. Murtha & Son.....	Kindling wood.....	27 75
14	L. Brandeis & Son.....	Plumbing machine.....	17 95
14	C. W. Keenan.....	Paints and brushes.....	142 50
14	Pratt Manufacturing Co.....	Naphtha.....	42 63
14	Hosford & Sons.....	Stationery.....	14 90
14	.. .. .	Pamphlet cases .. .	3 75
14	C. W. Keenan.....	Paint, &c.....	81 50
14	Peter B. Bracken.....	Turnips, corn and carrots	58 00
14	.. .. .	Horseshoeing.....	55 00

Statement of Accounts Certified to Auditor—Continued.

DATE.	NAME.	FOR.	AMOUNT.
May 19	C. W. Keenan.....	White lead, &c.....	\$57 75
19	..	Window glass, &c.....	37 43
19	..	Painting supplies.....	60 40
19	..	Muriatic acid.....	3 75
19	..	Turpentine, oil and paint	73 75
19	..	Boiled oil, &c.....	7 65
19	..	Oils, paints, &c.....	71 36
19	..	..	24 57
19	H. Hawkes.....	Labor, &c.....	34 00
19	Hosford & Sons.....	Stationery.....	6 25
19	Metropolitan Gas Light Company	Gas.....	30 28
19	..	..	17 68
19	A. V. Benoit.....	Engineering supplies...	59 35
19	Brooklyn Daily Eagle.....	Printing.....	13 25
19	Beers & Resseguie.....	Lumber.....	374 23
19	A. H. Hewes & Co.....	Flower Pots.....	54 00
19	Wm. Wall's Sons.....	Rope.....	62 41
19	Rubber Clothing Company.....	Hose.....	49 34
19	..	..	3 30
19	..	Rubber boots.....	30 04
19	L. Brandeis & Son.....	Plumbing supplies..	35 82
19	C. M. Moseman & Bro.....	Harness.....	112 50
19	..	..	49 00
19	..	..	24 00
19	Union Steam Printing Est.....	Printing.....	5 00
19	The Smith Trucking Company...	Moving trees and safe...	30 00
19	Brooklyn Gas Light Company...	Gas.....	12 15
19	Pay Roll.....	Officers and clerks.....	874 16
21	..	Laborers, &c.....	1,300 97
June 2	..	..	9,886 56
2	..	..	620 80
2	..	..	718 50
4	L. Conterno.....	Music—1st concert.....	160 00
5	John Y. Culyer.....	Incidental expenses...	53 30
5	William Bergen, Agent.....	Coal.....	214 20
5	..	..	30 60
5	..	..	61 20
5	..	..	147 90
5	..	..	30 60
5	Edward R. Shipman.....	Hay, oats, &c.....	194 21
5	..	Oats and corn.....	87 30
5	..	Hay.....	75 40
5	Henry Werner.....	Pinescroll.....	13 60
5	..	Pine mouldings.....	1 68
5	James H. Hart.....	Marine clock.....	7 00
5	Paul C. Coffin.....	Hardware.....	360 55
5	..	..	75
5	Frank J. Cole.....	White gloves and collars.	24 00
5	Thomas McCann.....	Broken stone, &c.....	157 50
5	Beers & Resseguie.....	Lumber.....	788 10
5	..	..	154 47
5	C. W. Keenan.....	Paint, &c.....	63 25
5	..	..	28 55

Statement of Accounts Certified to Auditor—Continued.

DATE.	NAME.	FOR.	AMOUNT.
June 6	C. W. Keenan.....	Varnish, shellac, &c.....	\$24 65
6	.. .. .	Whiting, oil, &c.....	45 47
6	L. Brandeis & Son.....	Plumbing materials.....	85 44
6	.. .. .	.. supplies.....	10 95
6	.. .. .	.. .. .	11 00
6	Wm. B. Dayton & Son.....	Tin roofing & painting.....	573 65
6	Watson and Pettinger.....	Lumber.....	276 83
6	.. .. .	.. .. .	164 79
6	Hosford & Sons.....	Stationery supplies.....	5 25
6	.. .. .	Shears and clips.....	2 50
6	Thomas Pierson.....	Pipe.....	96 00
6	Pitman & Read.....	Plast'g, Kalsom'ng &c.....	189 03
6	Pratt Manufacturing Co.....	Naphtha.....	42 24
6	Wm. Wall's Sons.....	Rope.....	8 26
6	Vanderbilt Bro's. Nephew.....	Seeds and ag'l. imp's.....	176 00
6	.. .. .	Clipping shears.....	1 25
6	The Smith Trucking Co.....	Trucking curb stone.....	75 00
6	Charles Johnson.....	Painting flag poles.....	155 00
6	W. B. Davis.....	Repairing wagons.....	89 28
6	Stackpole & Brother.....	Engineer's supplies.....	145 00
6	C. W. Keenan.....	Paint, &c.....	47 00
6	.. .. .	Supplies.....	11 35
6	C. M. Moseman & Bro.....	Harness.....	24 70
6	Brooklyn Daily Eagle.....	Printing.....	11 25
6	Union Steam Printing Est.....	.. .. .	6 00
6	Metropolitan Gas Light Co.....	Gas.....	19 08
6	Henry A. Noble.....	Excavating apparatus.....	482 00
6	L. Brandeis & Son.....	Gas fixtures.....	3 30
6	Harris & Stillwell.....	Broken stone.....	78 75
6	Peter Brackin.....	Horseshoeing.....	57 50
6	L. V. Plageman.....	Med. attend. sick horse.....	16 00
6	Whitman Saddle Co.....	Harness.....	60 75
6	Louis D. Beck.....	Gravel.....	1,450 00
6	Dennis Wheeler.....	Unloading gravel.....	160 00
8	L. Conterno.....	Music—2d Concert.....	160 00
18	.. .. .	.. 3d	160 00
18	George G. Martin.....	Printing an. report, 1885.....	41 29
22	Pay roll.....	Officers and clerks.....	874 16
23	L. Conterno.....	Music—4th concert.....	160 00
30	.. .. .	.. 5th	160 00
July 1	E. & F. Conklin.....	Blue stone coping, &c.....	2,730 00
2	Pay roll.....	Laborers, &c.....	7,872 83
2	.. .. .	.. .. .	193 98
2	.. .. .	.. .. .	553 06
2	John Y. Culyer.....	Incidental expenses.....	111 78
2	Dr. Jerome Walker.....	Medical services.....	63 00
2	Pay roll.....	Laborers, &c.....	387 90
7	L. Conterno.....	Music—6th concert.....	160 00
7	Newcomb & Co.....	Police helmets.....	115 15
7	H Branch.....	Re-bronzing flower vases.....	15 00
7	Paul C. Coffin.....	Hardware.....	109 50
7	Edward R. Shipman.....	Straw.....	6 60
7	.. .. .	Oats and meal.....	89 38

Statement of Accounts Certified to Auditor—Continued.

DATE.	NAME.	FOR.	AMOUNT.
July	7 Edward R. Shipman	Hay.....	\$83 88
	7	Oats, &c.....	108 38
	7 Metropolitan Gas Light Co.....	Gas.....	27 83
	7 .. .. .	.....	16 28
	7 Pratt Brothers.....	Plants.....	65 00
	7 Brooklyn Gas Light Co.....	Gas.....	31 50
	7 Hosford & Sons	Stationery.....	3 50
	7 .. .. .	.....	34 80
	7 C. M. Moseman & Bro.....	Harness.....	9 00
	7 Wilson, Childs & Co.....	Iron tank, wagon, &c....	877 50
	7 Beers & Resseguie.....	Lumber.....	432 09
	7 .. .. .	.....	143 00
	7 L. Brandeis & Son.....	Plumbing materials.....	9 10
	7 Brooklyn Gas Light Co.....	Gas.....	28 50
	7 .. .. .	.....	45 00
	7 .. .. .	.....	9 45
	7 Brooklyn Daily Eagle.....	Printing.....	12 75
	7 Whitman Saddle Co.....	Harness.....	6 50
	7 R. H. Allen & Co.....	Rep'g mowing machines ..	14 00
	7 Janes & Kirtland.....	Road grates and frames ..	384 09
	7	Lantern pieces.....	96 00
	7 Wm. Walls Sons.....	Water casks.....	8 25
	7 Janes & Kirtland.....	Garden rollers.....	70 00
	7 Watson & Pittinger.....	Lumber.....	203 40
	7 Hosford & Sons.....	Stationery.....	7 75
	7 James McLeer, P. M.....	Postage Stamps.....	20 00
	7 Pratt Manufacturing Co.....	Naphtha.....	42 50
	7 C. M. Moseman & Bro.....	Harness.....	1 50
	7 Brooklyn Improvement Co.....	Dockage.....	30 00
	7 Pitman & Read.....	Repairs to Park office....	4 75
	7 Pratt Manufacturing Co.....	Naphtha.....	41 48
	7 Jacob G. Minor.....	Lamp globes, &c.....	61 40
	7 E. J. Horsman	Markers.....	8 00
	7 Joseph G. Pollard.....	Belgian rammer.....	12 00
	7 Henry Werner.....	Signs.....	4 80
	7 Union Steam Printing Est'ment.	Printing.....	10 00
	7 Hosford & Sons.....	Stationery.....	16 50
	7 Wm. Bergen, Agent.....	Coal.....	5 10
	7 C. W. Keenan.....	Whiting.....	29 21
	7 Felix Campbell.....	Iron Pipe.....	12 37
	7 C. W. Keenan.....	Brushes.....	2 55
	7	Whiting.....	29 63
	13 Pay Roll.....	Laborers, &c.....	255 45
	15 L. Conterno	Music—7th concert.....	160 00
	21 Pay Roll.....	Officers and clerks.....	874 16
	21 L. Conterno	Music—8th concert.....	160 00
	28	Music—9th concert.....	160 00
Aug.	3 Pay Roll.....	Laborers, &c.....	7,251 76
	3 .. .. .	.....	148 55
	3 .. .. .	.....	306 96
	3 L. Conterno.....	Music—10th concert.....	160 00
	13 John Y. Culyer.....	Incidental expenses.....	30 61
	13 L. Brandeis & Son.....	Plumbing materials.....	12 76

Statement of Accounts Certified to Auditor—Continued.

DATE.	NAME.	FOR.	AMOUNT.
Aug. 13	L. Brandeis & Son.....	Plumbing materials.....	\$1 20
13	.. .. .	.. .. .	8 00
13	.. .. .	.. .. .	1 40
13	Pratt Manufacturing Co.....	Naphtha	42 76
13	Metropolitan Gas Light Co.....	Gas	29 40
13	Union Steam Printing Estab't.....	Printing.....	4 50
13	Rubber Clothing Co.....	Hose	56 25
13	Stephen Stevenson.....	Soap	6 25
13	C. W. Keenan.....	Whiting.....	28 41
13	F. L. Temple.....	Trees.....	205 00
13	Edward R. Shipman.....	Oats	37 63
13	.. .. .	Axle grease	3 00
13	.. .. .	Oats, feed and meal	100 25
13	.. .. .	Salt.....	8 25
13	Wm. Berri's Sons.....	Rugs.....	10 50
13	R. H. Allen Co.....	Pinion for mowing mach.....	1 00
13	L. V. Plageman.....	Veterinary services.....	28 00
13	C. W. Keenan.....	Oil and matches.....	7 30
13	.. .. .	Supplies	9 89
13	S. Henderson & Son.....	Use of chairs.....	14 00
13	J. M. Hopper.....	Use of camp chairs.....	17 75
13	The Brooklyn Gas Light Co.....	Gas.....	11 70
13	Newcomb & Co.....	Helmets, &c	11 70
13	Brooklyn Gas Light Co.....	Gas	30 90
13	John Morton & Son.....	Cement and brick.....	25 90
13	Union Steam Printing Estab't.....	Printing.....	8 00
13	Paul C. Coffin.....	Hardware	65 34
13	Mrs. A. J. Jenkins.....	Repairing flags.....	40 00
13	John Morton & Sons.....	Plaster, cement, &c.....	213 30
13	Brooklyn Daily Eagle.....	Printing	25 25
13	Pay Roll.....	Officers and clerks.....	874 16
13	L. Conterno.....	Music—11th concert.....	160 00
Aug. 25	.. .. .	Music—12th concert.....	160 00
Sept. 3	Pay Roll.....	Laborers, &c.....	4,227 94
3	.. .. .	.. .. .	130 05
3	.. .. .	.. .. .	1,525 00
3	.. .. .	.. .. .	1,185 00
15	A. W. Shadbolt & Son.....	Wagon repairing, &c.....	133 99
15	Frank J. Cole.....	White gloves.....	18 00
15	Pratt Manufacturing Co.....	Naphtha.....	42 37
15	Wm. Porter's Sons.....	Lamps.....	16 00
15	Wm. H. Douglas.....	Witch Hazel.....	1 50
15	Hosford & Sons.....	Blank books.....	4 95
15	.. .. .	Blank books.....	5 00
15	Edward R. Shipman.....	Oats	80 63
15	.. .. .	Feed and meal.....	22 50
15	C. W. Keenan.....	Whiting.....	28 19
15	Whitman Saddle Co.....	Repairing saddle, &c.....	6 25
15	Frederick Loeser & Co.....	Supplies	6 62
15	.. .. .	.. .. .	30
15	W. C. Vosburgh Mfg Co.....	Lamp chimneys.....	1 20
15	Patent Water and Gas P. Co.....	Water pipe.....	11 20
15	Brooklyn Gas Light Co.....	Gas.....	24 60

Statement of Accounts Certified to Auditor—Continued.

DATE.	NAME.	FOR.	AMOUNT.
Sept. 15	Brooklyn Gaslight Co.....	Gas.....	\$11 70
15	Paul C. Coffin.....	Hardware.....	13 55
15	N. Y. Refining Co.....	Engine oil.....	37 50
15	Pratt Manufacturing Co.....	Naphtha.....	42 71
15	Metropolitan Gas Light Co.....	Gas.....	30 80
15	Edward R. Shipman.....	Oats, corn and meal.....	57 50
15	.. ..	Oats.....	32 00
15	John Y. Culyer.....	Incidental expenses.....	45 75
21	Pay roll.....	Officers and clerks.....	874 16
Oct. 1	.. ..	Laborers, &c.....	4,098 74
1	.. ..	.. ..	42 00
1	.. ..	.. ..	1,263 12
6	C. M. Moseman & Bro.	Harness.....	26 90
6	Metropolitan Gas Light Co.....	Gas.....	18 38
6	Edward R. Shipman.....	Oats and Meal.....	52 30
6	Isaac Knee, Jr.	Repairing harness.....	11 00
6	Whitman Saddle Co.....	Harness.....	1 75
6	A. V. Benoit.....	Drawing materials.....	25 55
6	Hosford & Son.....	Ink.....	1 50
6	Henry R. Worthington.....	Tube brushes.....	4 25
6	National Meter Co.....	Re-pairing meter.....	60
6	James McLeer, P. M.....	Postage stamps.....	20 00
6	Brooklyn Gas Light Co.....	Gas.....	37 80
6	.. ..	.. ..	3 45
6	Brooklyn Daily Eagle.....	Printing.....	3 50
6	.. ..	.. ..	5 25
6	Pratt Manufacturing Co.....	Naphtha.....	42 92
6	C. W. Keenan.....	Crude oil and whiting.....	27 35
6	Edward R. Shipman.....	Corn.....	25 00
6	.. ..	Oats, feed and meal.....	91 25
6	Cole & Co.....	Boiler supplies.....	35 00
6	Metropolitan Gas Light Co.....	Gas.....	16 10
6	.. ..	.. ..	24 33
6	.. ..	.. ..	13 48
6	George W. Lyon.....	Wagon.....	60 00
6	George E. Mason.....	Lettering sign.....	15 00
6	Metropolitan Gas Light Co.....	Gas.....	27 13
6	Hosford & Sons.....	Stationery.....	4 75
6	.. ..	.. ..	8 15
6	C. M. Moseman & Bro.....	Harness.....	3 75
6	.. ..	.. ..	7 30
6	I. H. Dahlman.....	Horse.....	150 00
6	Dr. Jerome Walker.....	Medical services.....	60 00
6	John Y. Culyer.....	Incidental expenses.....	34 96
6	Baker, Voorhis & Co.....	Session laws of 1885.....	2 00
16	Williamsburgh City Fire Ins. Co.	Insurance.....	196 84
19	Pay roll.....	Officers and clerks.....	874 16
Nov. 5	.. ..	Laborers, &c.....	3,795 65
11	.. ..	.. ..	139 65
11	.. ..	.. ..	1,110 14
5	.. ..	.. ..	698 51
11	John Y. Culyer.....	Incidental expenses.....	50 28
11	Brooklyn Gaslight Co.....	Gas.....	30 75

Statement of Accounts Certified to Auditor—Concluded.

DATE.	NAME.	FOR.	AMOUNT.
Nov. 11	Brooklyn Gas Light Co.....	Gas	\$11 70
11	Pratt Manufacturing Co.....	Naphtha	43 77
11	Brooklyn Daily Eagle.....	Printing	4 25
11	Edward R. Shipman.....	Oats, corn and feed.....	105 88
11	.. ..	Oats and meal	63 88
11	.. ..	Axle grease.....	3 00
11	A. V. Benoit.....	Engineering supplies...	7 70
11	Bruce & Cook.....	Galvanized iron.....	16 04
11	E. K. Sackett	Witch Hazel	6 00
11	Wm. Porter's Sons.....	Lampwicks	3 60
11	A. V. Benoit.....	Tracing cloth.....	10 50
11	C. W. Keenan.....	Glass	17 70
11	Wm. Wall's Sons.....	Rope	84
11	Metropolitan Gas Light Co.....	Gas.....	25 20
11	Knickerbocker Ice Co.....	Ice	11 60
11	C. W. Keenan.....	Supplies	8 45
11	.. ..	Illuminating oil.....	7 61
11	John Gallagher & Bro.....	Carriage hire.....	22 00
11	C. M. Moseman & Bro.....	Whip	1 00
11	W. B. Davis.....	Repairing wagons.....	43 60
11	Metropolitan Gas Light Co.....	Gas	30 63
11	C. W. Keenan.....	Paints and supplies	12 68
11	Wilson & Company.....	Drain pipe.....	30 00
13	Hosford & Sons.....	Stationery.....	7 50
13	Pratt Manufacturing Co.....	Naphtha	43 01
13	Cowperthwait Co.....	Chairs	16 00
14	Pay Roll.....	Officers and clerks.....	874 16
Dec. 5	.. ..	Laborers, &c.....	4,186 57
5	.. ..	.. ..	28 23
5	.. ..	.. ..	710 00
5	John Y. Culyer.....	Incidental expenses.....	36 00
10	Pay Roll.....	Officers and clerks.....	874 16
	Total.....	.....	\$162,500 00

REPORT OF THE

Names of men of all grades employed through the year 1885.

NAME.	RESIDENCE.	WARD.	TIME EMPLOYED.	RATE OF PAY.	LENGTH OF SERVICE.
John Maguire	Underhill avenue.	9	2,745 hours.	50c. per hour	19 years
Harvey T. Davis	483 Flatbush avenue.	9	2,890 ..	45c. ..	19 ..
Michael Moran	12 Fort Greene place.	11	2,684 ..	40c. ..	19 ..
Patrick Conway	Sixteenth street and Eleventh avenue	22	334 ..	\$17 per week	19 ..
William H. Spear	126 Lincoln place.	22	12 mos.	\$157.50 per month.	18 ..
Samuel A. Dunn	383 Tenth street.	22	2,360 hours.	35c. per hour	18 ..
Robert Ayres	302 Thirteenth street.	22	2,265 ..	35c. ..	18 ..
Michael McLachlan	241 Tenth street.	22	3,137 ..	30c. ..	18 ..
Joseph Quevedo	Flatbush. ....	.....	2,846 ..	30c. ..	18 ..
William Moran	658 Grand avenue.	9	2,700 ..	20c. ..	18 ..
Thomas Brady	161 Huntington street.	12	2,333 ..	20c. ..	18 ..
John McGraw	Flatbush. ....	.....	2,614 ..	20c. and 22½c. per hour.	18 ..
Patrick Walsh	Washington avenue.	9	3,607 ..	20c. per hour	18 ..
Valentine Cox	Underhill avenue.	9	2,845 ..	15c. ..	18 ..
William Flaherty	491 Warren street.	10	2,499 ..	15c. ..	18 ..
Thomas Finsley	424 Warren street.	10	3,092 ..	15c. ..	18 ..
Michael Kenife	54 Underhill avenue.	9	3,550 ..	15c. ..	18 ..
George Weigner	558 Sixth avenue.	22	438 ..	15c. ..	18 ..
David W. Thompson	Bergen street.	9	3,030 ..	17½c. and 20c. per hour.	18 ..
James Faye	819 Dean street.	9	3,383 ..	30c. per hour	18 ..
James Finsley	424 Warren street.	10	3,086 ..	15c. ..	18 ..
Michael Monahan	781 Dean street	9	3,193 ..	15c. ..	18 ..
William Edwards	468 Sixteenth street.	22	334 ..	\$17 per week	18 ..
Herman F. Schmidt	Flatbush .....	.....	208 ..	15 and 17 per week	18 ..
Benjamin F. Powell	268 Fifteenth street.	22	288 ..	15 per week.	18 ..
Michael McLachlan	Bedford avenue.	24	304 ..	15 ..	18 ..
John O'Reilly	553 Vanderbilt avenue.	9	926 ..	15 ..	18 ..
Lawrence Hayes	346 Twenty-second street.	8	304 ..	15 ..	18 ..
John Crumley	Washington avenue.	9	325 ..	15 ..	18 ..

James M. Tobin.....	62 Park place.....	22	3,340	17½c. per hour.....	18
George Fynes.....	Prospect place.....	9	2,518	20c. and 22½c. per hour.....	17
William Mossrop.....	Flatbush avenue.....	9	2,434	20c. and 22½c. ..	17
Philip McManus.....	200 Butler street.....	10	2,490	20c. and 22½c. ..	17
Samuel Rogers.....	723 Franklin avenue ..	20	2,900	15c. per hour.....	17
James Furey.....	189 Navy street	11	1,603	15c. ..	17
Miles Sweeney.....	211 Livingston street.....	3	2,615	30c. ..	17
John Hamilton.....	98 Hall street.....	7	1,670	30c. ..	17
William Watson.....	669 Bergen street.....	9	3,140	15c. ..	17
Michael Donnelly.....	Auburn place.....	11	307	\$15 per week.....	17
Charles Rogers.....	723 Franklin avenue ..	24	301	15 ..	17
Hugh Kelly.....	90 North Sixth street.....	14	325	15 ..	17
William E. Travis.....	Flatbush.....	..	3,281	35c. per hour.....	17
Daniel Hynes.....	96 Hudson avenue	5	1,317	15c. ..	16
Richard Stillwell.....	Flatbush.....	..	326	\$15 per week	16
David Maxwell.....	Sixteenth street.....	22	308	15 ..	16
John Brasch.....	403 Prospect avenue.....	22	333	17 ..	16
Michael Farrell.....	645 Washington avenue.....	9	2,025	20c. per hour.....	15
Patrick Hartigan.....	Clason avenue.....	9	2,764	15c. ..	15
Thomas Cullen.....	1141 Park Place.....	24	3,072	15c. ..	15
Hugh McGuire.....	Twelfth street	22	464	15c. ..	15
Edward J. Kenney.....	1054 Roger avenue.....	24	265	\$17 per week.....	14
Patrick Byrne (1).....	256 Sixteenth street.....	22	310	15 ..	14
Patrick Byrne (2).....	123 Eagle street.....	17	315	15 ..	14
William Wilson.....	252 Sixteenth street.....	22	296	15 ..	14
William Ring.....	357 Prospect avenue.....	22	236	15 ..	14
Patrick Wallace.....	670 Atlantic avenue.....	9	3,187	15c. per hour.....	14
John Hickey.....	234 St. Marks avenue ..	9	3,286	15c. and 17½c. per hour.....	13
Timothy Gilbooley.....	Flatbush.....	..	2,561	15c. per hour	13
John Grine.....	7 Dennet Place.....	12	1,157	15c. ..	13
James Anderson.....	255 Seventeenth street ..	8	2,350	20c. ..	13
James Cassidy.....	216 Sixteenth street.....	22	334	\$15 and \$17 per week.....	13
John H. Lozier.....	655 Dekalb avenue.....	23	328	15 per week.....	13
Willett Hicks.....	350 Seventeenth street.....	8	3,065	15c. per hour.....	12
Isaac Harris.....	Flatbush avenue.....	9	1,124	45c. and 50c. per hour.....	12
Isaac Harris.....	Flatbush avenue.....	9	780	45c. and 50c. ..	12
Isaac Harris.....	Flatbush avenue.....	9	555	45c. and 50c. ..	12
Isaac Harris.....	Flatbush avenue.....	9	506	45c. and 50c. ..	12

Names of men of all grades employed through the year 1885—Continued.

NAME.	RESIDENCE.	WARD.	TIME EMPLOYED.	RATE OF PAY.	LENGTH OF SERVICE.
Isaac Harris	Flatbush avenue.....	9	203 hours..	45c. and 50c. per hour.....	12 years
John Kildea.....	676 Bergen street.....	9	3,416 ..	17 ³ / ₄ c per hour ..	11 ..
James Pinkerton.....	753 Washington avenue ..	9	286 ..	\$11 per week...	11 ..
W. R. Dickinson.....	3 Weirfield street.....	18	204 ..	30c. per hour.....	11 ..
Michael Smith.....	676 Bergen street.....	9	309 ..	\$15 per week.....	11 ..
Daniel Calnan.....	221 Bridge street.....	5	334 ..	15 ..	11 ..
Henry J. Farquhar.....	387 Monroe street.....	23	2,330 ..	40c. and 50c. per hour.....	10 ..
Peter Brackin.....	556 Fifteenth street.....	22	260 ..	25c. per hour.....	10 ..
Peter Brackin.....	556 Fifteenth street.....	22	100 ..	25c. ..	10 ..
Peter Brackin.....	556 Fifteenth street.....	22	1,387 ..	25c. ..	10 ..
Peter Brackin.....	556 Fifteenth street.....	22	968 ..	25c. ..	10 ..
Peter Brackin.....	556 Fifteenth street.....	22	1,477 ..	45c. and 50c. per hour.....	10 ..
Peter Brackin.....	556 Fifteenth street.....	22	1,179 ..	45c. and 50c. ..	10 ..
Peter Brackin.....	556 Fifteenth street.....	22	675 ..	45c. and 50c. ..	10 ..
Peter Brackin.....	556 Fifteenth street.....	22	336 ..	45c. and 50c. ..	10 ..
Peter Brackin.....	556 Fifteenth street.....	22	264 ..	45c. and 50c. ..	10 ..
Peter Brackin.....	556 Fifteenth street.....	22	160 ..	45c. and 50c. ..	10 ..
John D. Lloyd.....	212 Prospect place.....	9	328 ..	\$15 per week.....	10 ..
Ann Hosey.....	Franklin avenue.....	9	1,935 ..	10c. per hour.....	10 ..
John Casserley.....	228 Park place.....	9	2,501 ..	20c. ..	8 ..
James Jennings.....	552 Fifteenth street.....	22	3,273 ..	15c. ..	8 ..
Henry T. Hilton.....	Flatbush avenue.....	9	3,801 ..	15c. per hour and \$15 per wk	8 ..
Thomas Kelley.....	601 Washington avenue.....	9	2,015 ..	15c. per hour.....	8 ..
James Cloonan.....	290 Eleventh street.....	22	3,211 ..	15c. ..	8 ..
John Gill.....	670 Douglass street.....	9	3,080 ..	15c. ..	8 ..
Robert Fleming.....	Flatbush.....	.....	2,783 ..	15c. ..	8 ..
Thomas Hartigan.....	657 Douglass street.....	9	3,297 ..	15c. ..	8 ..
Patrick Kelly.....	100 Prince street.....	11	1,950 ..	15c. ..	8 ..
Adolph Silbie.....	Thirteenth street.....	22	2,338 ..	30c. ..	8 ..

Theodore Green.....	1660 Baltic street	22	1,349	30c.	8
Philip Rosmarin.....	Flatbush	22	2,825	30c.	7
Thomas O'Hara.....	603 Sixteenth street.....	22	3,913	15c.	7
James Ogilvie.....	Sixteenth street & Eleventh avenue	22	3,071	15c.	7
Patrick Phillips.....	380 Seventeenth street.....	8	2,693	15c.	7
Mary Kennington.....	505 Prospect avenue	8	321	25c.	7
Ellen Condon.....	Underhill avenue	9	3,340	10c.	7
Lizzie Pallin.....	Fifteenth street.....	22	3,340	10c.	7
Frank Draher.....	390 Fourteenth street	22	2,972	20c.	6
William Taylor.....	Degraw street	6	2,860	17½c.	6
John Pallin.....	530 Fifteenth street	22	231	15c.	6
Patrick Fitzgerald.....	Bergen street.....	9	273	\$3.50 per week	6
George Mason.....	Sixth avenue.....	22	50	30c. per hour.	6
Jane Mannay.....	65 Lawrence street	5	3,340	10c.	6
John Brackin.....	556 Fifteenth street	22	2,867	20c.	6
Robert Wallace.....	Bridge street	5	3,340	10c. and 15c. per hour.	5
Michael Morrissey.....	259 Twentieth street.....	8	316	\$15 per week.	5
James Ennis.....	11 Fourth street	10	332	15	5
Michael Gregory.....	104 Douglass street.....	10	326	15	5
John Kessler.....	103 Palmetto street.....	18	4	15	5
Wm. H. C. Brown.....	242 South Third street	13	309	15	5
Charles T. Monk.....	61 Meeker avenue	17	323	15	5
Patrick Kenna.....	847 Pacific street.....	9	322	15	5
William H. Wilson.....	154 Twenty-first street	8	176	15	5
John Savage.....	Park Place.....	9	298	17½c. per hour.	5
William Quinn.....	Fifteenth street.....	22	3,299	15c.	4
Thomas Quinn.....	Fifteenth street.....	22	3,919	15c.	4
Thomas Byrnes.....	Warren street.....	9	24	15c.	4
Mary McGunnigan.....	Sixteenth street.....	22	1,470	10c.	4
Charles S. Clamplitt.....	Douglass street.....	9	30	15c. per hour and \$15 per wk	4
James Riley.....	715 Prospect place	9	2,472	20c.	3
James Callahan.....	Flatbush	9	2,741	15c.	3
Peter Drgan.....	Sixteenth street & Eleventh avenue	22	2,144	15c.	3
Frank McGovern.....	Sixth avenue and Sixteenth street.	22	1,882	15c.	3
John Halloran.....	President street	9	1,672	15c.	3
James Hennessey.....	29 Second place	6	246	15c.	3
Charles J. Kinsey.....	521 Fifth avenue	22	1,130	30c.	3
George Ayres.....	302 Thirteenth street.....	22	1,187	25c.	3

Names of men of all grades employed through the year 1885—Continued.

NAME.	RESIDENCE.	WARD.	TIME EMPLOYED.	RATE OF PAY.	LENGTH OF SERVICE.
William Le Count.....	594 Sixth avenue.....	22	250 hours.	30c. per hour.....	3 years
Charles Fowler.....	252 Sumner avenue.....	23	340 ..	30c. ..	3 ..
James W. Buckley.....	218 Sixteenth street.....	22	334 ..	\$17. per week.....	3 ..
Mary Murray.....	91 Sackett street.....	6	3,340 ..	10c. per hour.....	3 ..
John Donovan.....	Thirteenth street.....	22	350 ..	15c. ..	3 ..
Frank Fox.....	897 Pacific street.....	9	240 ..	15c. ..	3 ..
Ernest Kasold.....	639 Henry street.....	6	3,340 ..	30c. ..	2 ..
Michael Kenney.....	34 Eleventh street.....	22	1,951 ..	15c. and 17½c. per hour.....	2 ..
John Alymer.....	721 Fifth avenue.....	8	353 ..	17½c. per hour.....	2 ..
Bernard Matthews.....	50 Underhill avenue.....	9	3,340 ..	10c. ..	2 ..
Frank Heywood.....	475 Hudson avenue.....	11	2,376 ..	15c. ..	2 ..
John Brett.....	654 Washington avenue.....	9	1,229 ..	15c. ..	2 ..
Peter Doyle.....	Sixteenth street.....	22	2,568 ..	15c. ..	2 ..
Edward Horan.....	Herkimer street.....	23	2,087 ..	15c. ..	2 ..
William Gavin.....	8 Tillary street.....	4	1,317 ..	15c. ..	2 ..
Patrick Moran.....	710 Washington avenue.....	9	1,668 ..	15c. ..	2 ..
Dennis Murphy.....	603 Sixteenth street.....	22	1,583 ..	15c. ..	2 ..
Charles Brady.....	Flatbush.....	23	23 ..	15c. ..	2 ..
Thomas Langan.....	605 Sixteenth street.....	22	1,176 ..	15c. ..	2 ..
John Dimon.....	Flatbush.....	31	31 ..	15c. ..	2 ..
James Keating.....	Pacific street.....	9	8 ..	15c. ..	2 ..
Eugene Sullivan.....	353 Twentieth street.....	8	89 ..	15c. ..	2 ..
Dennis Sullivan.....	353 Twentieth street.....	8	44 ..	15c. ..	2 ..
Peter Claffey.....	445 Sixteenth street.....	22	926 ..	15c. ..	2 ..
Henry B. Stall.....	474 Grand avenue.....	7	1,940 ..	20c. ..	2 ..
Thomas Kelly.....	292 Broadway.....	16	2,044 ..	20c. ..	2 ..
Frederick Frederickson.....	899 Atlantic avenue.....	9	428 ..	25c. ..	2 ..
Elijah D. Pepper.....	44 Monroe street.....	23	145 ..	30c. ..	2 ..
Henry Claxton.....	Pacific street.....	9	409 ..	30c. ..	2 ..

Albert Vedder.....	Grand avenue.....	9	648	15c.	..	2
Willard Pratt.....	328 Fifteenth street.....	22	332	\$15	per week.	2
Jesse K. Hatfield.....	124½ Twenty-third street.....	8	334	15	..	2
Frank E. Miller.....	326 Court street.....	6	326	15	..	2
Anthony Smith.....	19 DeKalb avenue.....	11	3,340	15c.	per hour.	2
Charles B. Weissman.....	554 Marcy avenue.....	23	184	\$15	per week	2
John Corcoran.....	59 Sackett street.....	6	1,097	15c.	per hour.	2
John Lennon.....	867 Park place.....	9	350	15c.	..	2
James Peacock.....	13 Dennett place.....	12	305	15c.	..	2
George W. Paynton.....	286 Eighteenth street.....	8	257	15c.	..	2
Edward Shanahan.....	Nineteenth street.....	8	452	15c.	..	2
Albert G. Moore.....	912 Dean street.....	9	238	15c.	..	2
Edward Hosey.....	Franklin avenue.....	9	475	15c.	..	2
James Heffernan.....	Sixteenth street and Seventh avenue	22	25	15c.	..	2
Thomas Connaughton.....	748 Butler street.....	9	696	15c.	..	2
William Hanlon.....	247 States street.....	3	904	20c. and 22½c. per hour.	..	2
Patrick Dunn.....	Eight street.....	22	120	15c. and 17½c.	..	2
Michael Plunkett.....	443 Sackett street.....	10	361	15c.	per hour.	2
Nicholas Donovan.....	220 Twenty second street.....	8	210	15c.	..	2
Timothy Murphy.....	Twelfth street.....	22	397	15c.	..	2
John Cumerford.....	Sixteenth street.....	22	632	15c.	..	2
Henry Gordon.....	Seventeenth street.....	8	823	15c.	..	2
Cornelius Robertson.....	619 Classon avenue.....	9	210	15c.	..	2
George Kasold.....	338 Navy street.....	11	265	15c.	..	2
James Rickard.....	105 President street.....	6	2,959	20c.	..	2
William Callahan.....	668 Douglass street.....	9	470	15c.	..	1 yr. and under
John Bergen.....	Flatbush.....	22	231	15c.	..	
Donald Dixon.....	603 Sixteenth street.....	22	1,428	15c.	..	
Frank Furey.....	58 Pacific street.....	6	462	15c.	..	
Patrick Doyle.....	Flatbush.....	22	23	15c.	..	
James O'Hara.....	Sixteenth street.....	22	23	15c.	..	
Joseph Phillips.....	Carroll street.....	22	2,841	15c.	..	
James Kelley.....	380 Seventeenth street.....	8	8	15c.	..	
Thomas Higgins.....	258 Hoyt street.....	10	8	15c.	..	
James McGraw.....	Washington avenue.....	9	8	15c.	..	
John Moran.....	Flatbush.....	3	73	15c.	..	
	247 States street.....	3	13	15c.	..	

Names of men of all grades employed through the year 1885--Continued.

NAME.	RESIDENCE.	WARR.	TIME EMPLOYED.	RATE OF PAY.	LENGTH OF SERVICE.
Anthony McGovern.....	54 Washington avenue.....	20	58 hours.	15c per hour.....	1 yr. and under.
Patrick Rogers	Flatbush avenue.....	9	269 ..	15c. ....	..
John Furey.....	88 Pacific street.....	6	154 ..	15c. ....	..
Valentine Geotell.....	Flatbush.....	..	8 ..	15c. ....	..
William Joyce.....	Franklin avenue.....	9	4 ..	15c. ....	..
Thomas Keegan.....	Underhill avenue.....	9	11 ..	15c. ....	..
James McConville.....	307 Hudson avenue.....	5	16 ..	15c. ....	..
Patrick Purcell.....	St. Marks avenue.....	9	8 ..	15c. ....	..
James McGee.....	Nineteenth street.....	8	8 ..	15c. ....	..
Edward Conner.....	683 Sixth avenue.....	8	8 ..	15c. ....	..
Edward Maher.....	Flatbush.....	..	32 ..	15c. ....	..
Michael Daly.....	Park avenue.....	7	36 ..	15c. ....	..
Charles Fitzgerald.....	681 Butler street.....	9	8 ..	15c. ....	..
Matthew Mannon.....	760 Douglass street.....	9	8 ..	15c. ....	..
Matthew Tierney.....	Washington avenue.....	9	8 ..	15c. ....	..
Michael Cronan.....	Sixteenth street.....	22	313 ..	15c. ....	..
John Sullivan.....	Sixteenth street.....	22	32 ..	15c. ....	..
Henry Fisher.....	Flatbush.....	..	8 ..	15c. ....	..
David Roth.....	Flatbush.....	..	7 ..	15c. ....	..
Charles Townes.....	Coney Island.....	..	7 ..	15c. ....	..
John Simmonds.....	Washington avenue.....	9	23 ..	15c. ....	..
John Milton.....	St. Marks avenue.....	9	8 ..	15c. ....	..
James Joyce.....	Washington avenue.....	9	76 ..	15c. ....	..
John Geary.....	248 Twentieth street.....	8	4 ..	15c. ....	..
John Kelley.....	135 Nevins street.....	10	49 ..	15c. ....	..
John Maxwell.....	809 Washington avenue.....	9	13 ..	15c. ....	..
James Maxwell.....	809 Washington avenue.....	9	19 ..	15c. ....	..
Andrew Mann.....	674 Butler street.....	9	8 ..	15c. ....	..
Hugh O'Donnell.....	521 Washington avenue.....	9	54 ..	15c. ....	..

Andrew Cassidy.....	59 Vanderbilt avenue.....	9	17	15c.	.....
Thomas Bounce.....	Flatbush avenue.....	22	6	15c.	.....
Patrick Welch.....	Braxton street.....	22	6	15c.	.....
Michael Morris.....	Crown street.....	9	6	15c.	.....
Michael Cassidy.....	591 Vanderbilt avenue.....	9	6	15c.	.....
Sidney Byrnes.....	659 Douglass street.....	9	17	15c.	.....
John Leary.....	357 Park place.....	9	5	15c.	.....
Paul Sholl.....	543 Fifteenth street.....	22	6	15c.	.....
William Wilson.....	244 Park place.....	9	6	15c.	.....
Martin McCaulay.....	885 Bergen street.....	9	6	15c.	.....
Frank Wages.....	Flatbush.....	.....	6	15c.	.....
Marlin Connor.....	729 Classon avenue.....	9	6	15c.	.....
James Farrell.....	277 St. Marks avenue.....	9	1	15c.	.....
James Garley.....	550 Bergen street.....	9	1	15c.	.....
Michael Collins.....	852 Atlantic avenue.....	9	5	15c.	.....
James O'Donnell.....	790 Dean street.....	9	15	15c.	.....
Michael Connor.....	792 Classon avenue.....	9	1	15c.	.....
John Quinn.....	673 Butler street.....	9	28	15c.	.....
John Rosette.....	964 Atlantic avenue.....	9	43	15c.	.....
Barney Lennon.....	867 Park place.....	9	5	15c.	.....
Timothy Ryan.....	771 Bergen street.....	9	5	15c.	.....
John Rogers.....	644 Classon avenue.....	9	1	15c.	.....
John Sweeney.....	780 Dean street.....	9	1	15c.	.....
John Glenn.....	61 Flushing avenue.....	20	5	15c.	.....
Patrick Sheu.....	666 Douglass street.....	9	5	15c.	.....
John Elliot.....	654 Douglass street.....	9	5	15c.	.....
Timothy Deer.....	President street.....	9	5	15c.	.....
John Heeny.....	754 Bergen street.....	9	7	15c.	.....
John Bloomer.....	904 Atlantic avenue.....	9	19	15c.	.....
Thomas Welch.....	Franklin avenue.....	23	12	15c.	.....
William Bannon.....	34 Eleventh street.....	22	73	15c.	.....
Stephen Doherty.....	614 Grand avenue.....	9	33	15c.	.....
Isaac Main.....	176 Jay street.....	4	2,024	30c.	.....
Patrick Quinn.....	145 Hudson avenue.....	5	420	30c.	.....
James Wallace.....	208 Concord street.....	5	574	20c.	.....
Edward Green.....	343 Seventeenth street.....	8	305	20c.	.....
Mortimer Funnell.....	228 Washington street.....	4	230	30c.	.....
George Anderson.....	Van Brunt street.....	12	175	30c.	.....

Names of men of all grades employed through the year 1885—Continued.

NAME.	RESIDENCE.	WARD.	TIME EMPLOYED.	RATE OF PAY.	LENGTH OF SERVICE.
James Beatty.....	500 Flushing avenue	19	495 hours.	20c. per hour	1 yr. and under
Jesse Potter.....	371 President street.....	10	770 ..	27½c. ....	..
Edward Stewart.....	145 Concord street.....	4	140 ..	30c. ....	..
Charles McLaughlin.....	508 Nineteenth street	8	38 ..	30c. ....	..
Thomas Rankin.....	555 Third avenue.	8	210 ..	35c. ....	..
William F. Quirk.....	Flabush avenue.....	9	200 ..	30c. ....	..
John Corcoran.....	59 Sackett street.....	6	135 ..	35c. ....	..
William Dolan.....	Prospect place.....	9	228 ..	45c. and 50c ..	..
John Wallace.....	89 High street.....	2	1,145 ..	15c. ....	..
John McLean.....	Fifteenth street	22	2,850 ..	17½c. and \$15 per week.	..
Patrick Smith.....	Fifteenth street.....	22	219 ..	\$15 per week ..	..
George M. Jacob.....	636 Third avenue.....	8	217 ..	15 ..	..
Patrick Hughes.....	52 Underhill avenue.....	9	6 ..	15 ..	..
John E. Denham.....	103 Eleventh street.....	22	290 ..	15 ..	..
Robert McElroy.....	203 Skillman street	7	42 ..	15 ..	..
Alfred C. Squire.....	28 Kosciusko street.....	21	252 ..	15 ..	..
Joseph Devine.....	405 Marion street.....	25	133 ..	15 ..	..
Charles C. Kimball.....	8 Union Place.....	15	2 ..	15 ..	..
Charles Nichols.....	199 Forty-fourth street.....	8	2 ..	15 ..	..
Thomas Byrne.....	113 Grand avenue.....	7	216 ..	15 ..	..
John Evers.....	839 Bergen street.....	9	150 ..	15 ..	..
Patrick Coughlan.....	250 Bergen street.....	10	180 ..	15 ..	..
Peter Campbell.....	30 Flint street.....	2	155 ..	15 ..	..
George A. Wilson.....	56 Ralph avenue.....	25	101 ..	15 ..	..
Patrick Kelly.....	89 Douglass street.....	10	8 ..	15c. per hour ..	..
John McGovern.....	Sixteenth street and Sixth avenue..	22	862 ..	15c. ....	..
Patrick Purcell, No. 1.....	St. Marks avenue	9	37 ..	15c. ....	..
Patrick Purcell, No. 2.....	St. Marks avenue	9	16 ..	15c. ....	..
Thomas Keating.....	645 Washington avenue.....	9	29 ..	15c. ....	..

Edward Mahoney.....	701 Atlantic avenue.....	20	361	15c.	..
Charles Brady.....	Flatbush.....	..	50	15c.	..
James Tierney.....	Washington avenue.....	9	4	15c.	..
John Heeney.....	754 Bergen street.....	9	40	15c.	..
John Flaherty.....	491 Warren street.....	10	78	15c.	..
John Ryan.....	771 Bergen street.....	9	140	15c.	..
Timothy Cox.....	Flatbush.....	9	250	15c.	..
John Dehlanty.....	253 Hamilton avenue.....	12	461	15c.	..
Patrick Hopkins.....	Third avenue.....	10	271	15c.	..
Charles Cowell.....	136 Wyckoff street.....	10	440	15c.	..
John Conway.....	Flatbush.....	..	133	15c.	..
Patrick Saxon.....	277 Van Brunt street.....	12	289	15c.	..
Anthony McNeely.....	New York.....	8	474	15c.	..
William White.....	Nineteenth street.....	8	280	15c.	..
John Crook.....	Flatbush.....	..	5	15c.	..
Patrick McGuire.....	27 Wyckoff street.....	10	690	15c.	..
Andrew McLachlan.....	761 Bergen street.....	9	249	15c.	..
William Burtis.....	640 Grand avenue.....	9	382	15c.	..
John Pratt.....	Sixteenth street.....	22	251	15c.	..
John Zimmermann.....	El hteenth street.....	8	119	15c.	..
Patrick Fox.....	897 Pacific street.....	9	252	15c.	..
John Marsh.....	639 Washington avenue.....	9	156	15c.	..
Patrick Fagan.....	60 Sixteenth street.....	22	381	15c.	..
James Reid.....	867 Park place.....	9	188	15c.	..
John McDonald.....	790 Dean street.....	9	224	15c.	..
Simon Fitzsimmons.....	683 Butler street.....	9	394	15c.	..
Patrick Hackett.....	Flatbush.....	..	393	15c.	..
James Finsley.....	575 Waverly avenue.....	7	340	15c.	..
John McKee.....	715 Dean street.....	9	16	15c.	..
John Burke.....	255 Navy street.....	5	6	15c.	..
Patrick Boyle.....	Eighteenth street.....	8	52	15c.	..
William Nelson.....	Underhill avenue.....	9	5	15c.	..
John McCabe.....	715 Dean street.....	9	3	15c.	..
Henry Smith.....	701 Butler street.....	9	80	15c.	..
John McQuirk.....	Flatbush.....	..	15	15c.	..
Thomas Lacey.....	Carroll street.....	9	8	15c.	..
Thomas Dignan.....	957 Atlantic avenue.....	9	25	15c.	..
Charles Devlin.....	Carroll street.....	9	5	15c.	..

Names of men of all grades employed through the year 1885—Continued.

NAME.	RESIDENCE.	WARD.	TIME EMPLOYED.	RATE OF PAY.	LENGTH OF SERVICE.
James Bayne.....	Court street.....	10	26 hours.	15c. per hour.	1 yr and under.
Thomas McNamara.....	Flatbush.....	.....	10 ..	15c.	..
Michael Cannon.....	792 Clason avenue.....	9	5 ..	15c.	..
James Greeley.....	61 Flushing avenue.....	7	29 ..	15c.	..
Michael Ward.....	772 Bergen street.....	9	5 ..	15c.	..
James Farrell.....	277 St. Marks avenue.....	9	24 ..	15c.	..
Michael Carroll.....	246 Flatbush avenue.....	22	5 ..	15c.	..
Hugh McArdle.....	143 North Oxford Street.....	7	5 ..	15c.	..
James Downey.....	248 St. Marks avenue.....	9	41 ..	15c.	..
Bernard Ganley.....	29 Fleet street.....	5	48 ..	15c.	..
John White.....	Seventh avenue.....	8	1,156 ..	15c.	..
John Grear.....	248 Twentieth street.....	8	25 ..	15c.	..
John Rattigan.....	710 Washington avenue.....	9	14 ..	15c.	..
John Cain.....	Seventh avenue.....	8	5 ..	15c.	..
Michael D'yle.....	Sixteenth street.....	22	38 ..	15c.	..
John Lee.....	515 Willoughby avenue.....	7	16 ..	15c.	..
Patrick Fox.....	897 Pacific street.....	9	13 ..	15c.	..
James Carney.....	651 Washington avenue.....	9	14 ..	15c.	..
William Red'ly.....	Flatbush.....	.....	5 ..	15c.	..
Hugh Keelan.....	683 Sixth avenue.....	22	41 ..	15c.	..
Patrick Malone.....	300 Hudson avenue.....	5	14 ..	15c.	..
John Connor.....	292 Clason avenue.....	9	14 ..	15c.	..
James Keamer.....	964 Atlantic avenue.....	9	3 ..	15c.	..
Hugh Carroll.....	246 Flushing avenue.....	7	33 ..	15c.	..
John Williams.....	Washington avenue.....	9	4 ..	15c.	..
Patrick Manning.....	760 Douglass street.....	9	12 ..	15c.	..
John Golden.....	173 Prospect place.....	9	5 ..	15c.	..
William Moore.....	68 Underhill avenue.....	9	5 ..	15c.	..
William McMann.....	156 Twelfth street.....	22	3 ..	15c.	..

John Shea	666 Douglass street.	9	24	15c.	..	..
Patrick Mahoney	701 Atlantic avenue.	20	11	15c.	..	..
William Rooney	63 Underhill avenue	9	16	15c.	..	..
John Leahy	357 Park place.	9	11	15c.	..	..
George Harris	Washington avenue.	9	11	15c.	..	..
James Greene	Flatbush .....	..	11	15c.	..	..
James McGibney	Flatbush .....	..	11	15c.	..	..
Michael Sweeney	780 Dean street.	9	11	15c.	..	..
Joseph Gorman	Washington avenue.	9	18	15c.	..	..
Henry Peterson	418 Eighteenth street.	8	8	15c.	..	..
Joseph Wilson	Butler street.	9	5	15c.	..	..
Dennis McGuire	Franklin avenue.	9	10	15c.	..	..
John Fegan	Fifteenth street.	22	10	15c.	..	..
Patrick Walsh	Braxton street.	22	381	15c.	..	..
Patrick Casey	553 Washington avenue.	9	10	15c.	..	..
William Eligot	St. Marks avenue.	9	9	15c.	..	..
Michael Cahill	Eastern Parkway	9	9	15c.	..	..
Charles Fitzgerald	683 Butler street.	9	9	15c.	..	..
William Terrell	543 Fifth avenue.	22	386	15c.	..	..
William McDonough	Underhill avenue.	9	8	15c.	..	..
Thomas Rowan	307 Hudson avenue.	5	8	15c.	..	..
Charles Byrnes	Warren street.	9	8	15c.	..	..
Thomas Leonard, 2d	Eastern Parkway	9	8	15c.	..	..
Thomas Trainor	144 Portland avenue	7	315	15c.	..	..
William Furey	888 Pacific street.	9	529	15c.	..	..
John Toohy	281 St. Marks avenue.	9	120	15c.	..	..
William Keenan	489 Eighteenth street.	8	859	15c.	..	..
Patrick Rogers	Bedford avenue	24	383	15c.	..	..
Michael Morris	68 Underhill avenue.	9	20	20c.	..	..
Charles Hegan	155 Butler street.	10	570	15c.	..	..
James McGrath	Washington avenue.	9	374	15c.	..	..
Henry Jarvis	883 Sixth avenue	8	79	15c.	..	..
Frank Hughes	229 St. Marks avenue.	9	90	15c.	..	..
John Conway	1 Chapel street.	4	523	15c.	..	..
Michael Kennedy	626 Chasson avenue.	9	165	15c.	..	..
Philip McGovern	90 Harrison street.	6	337	15c.	..	..
Thomas Keegan	Washington avenue.	6	337	15c.	..	..
Charles Mcarty	Eleventh avenue.	22	752	15c.	..	..

Names of men of all grades employed through the year 1885—Continued.

NAME.	RESIDENCE.	WARD.	TIME EMPLOYED.	RATE OF PAY.	LENGTH OF SERVICE.
David Ahern.....	Flatbush.....	.....	1,107 hours.	15c. per hour.....	1 yr and under.
Benjamin Sykes.....	37 First street....	10	1,226 ..	15c. ..	..
James Bayne.....	Sixteenth street....	22	249 ..	15c. ..	..
Martin Mines.....	411 Warren street..	10	200 ..	15c. ..	..
Patrick Burk.....	255 Navy street....	5	676 ..	15c. ..	..
George Banks.....	46 Degraw street..	6	350 ..	15c. ..	..
John Hanley.....	242 Navy street....	5	321 ..	15c. ..	..
John Heffernan....	340 Atlantic avenue..	3	364 ..	15c. ..	..
James Edwards.....	220 Twentieth street.	8	196 ..	15c. ..	..
Charles Moss.....	358 Eleventh street..	22	170 ..	15c. ..	..
Albert Myers.....	120 Withers street..	15	232 ..	15c. ..	..
Philip Queson.....	Flatbush.....	.....	45 ..	15c. ..	..
Alfred Evers.....	Classton avenue....	9	40 ..	15c. ..	..
John Donohue.....	Underhill avenue....	9	341 ..	15c. ..	..
John Eagan.....	Flatbush.....	.....	325 ..	15c. ..	..
Michael King.....	Carroll street.....	9	352 ..	15c. ..	..
Peter Duffy.....	140 Flatbush avenue..	3	300 ..	15c. ..	..
Robert Grafton.....	Twentieth street..	8	188 ..	15c. ..	..
Charles Brady.....	Flatbush.....	.....	431 ..	15c. ..	..
Michael Donohue....	Flatbush avenue....	9	435 ..	15c. ..	..
John Creighton.....	341 Seventh avenue..	22	327 ..	15c. ..	..
Peter Ledwith.....	76 Douglass street..	10	242 ..	15c. ..	..
Jacob Heindres.....	399 Pearl street....	11	300 ..	15c. ..	..
Patrick Collins.....	154 Grand avenue....	9	251 ..	15c. ..	..
Martin Welch.....	Flatbush.....	.....	331 ..	15c. ..	..
Michael Cruse.....	935 Pacific street....	9	336 ..	15c. ..	..
James Mooney.....	287 Nevins street....	10	1,036 ..	15c. ..	..
William Kenney.....	Classton avenue....	9	189 ..	15c. ..	..
John Marley.....	29 Fleet street....	6	320 ..	15c. ..	..

John Kilian.....	Douglas street.....	9	190	15c.	.....
John Karanagh.....	684 Dean street.....	9	162	15c.	.....
Court Hill.....	Flatbush.....	9	1,057	15c.	.....
Henry Schmidt.....	721 Butler street.....	9	440	15c.	.....
Charles Brown.....	372 Hudson avenue.....	5	380	15c.	.....
Andrew W. Flon.....	Gates avenue.....	23	400	15c.	.....
Thomas S. Crieley.....	243 Oxford street.....	7	200	15c.	.....
John McKeon.....	89 High street.....	4	151	15c.	.....
Patrick Dempsey.....	985 Gates avenue.....	23	107	15c.	.....
Matthew Johnson.....	23 Humboldt street.....	16	120	15c.	.....
William Heath.....	Flatbush.....	.....	286	15c.	.....
William Burnett.....	49 Columbia street.....	1	623	15c.	.....
Michael Downey.....	46 Degraw street.....	6	135	15c.	.....
John Stacom.....	175 Butler street.....	10	66	15c.	.....
Patrick Costello.....	Flatbush.....	.....	80	20c.	.....
Patrick Fannon.....	Columbia street.....	6	313	15c.	.....
John Fenton.....	272 Hudson avenue.....	11	232	15c.	.....
James Cullen.....	854 Grand avenue.....	9	139	15c.	.....
Patrick Murray.....	768 Bergen street.....	9	112	15c.	.....
Matthew Smith.....	Fifteenth street.....	22	201	15c.	.....
Patrick Furey.....	Flatbush.....	.....	89	15c.	.....
Joseph Weber.....	Tillary street.....	5	102	15c.	.....
Andrew Anderson.....	8 Twelfth street.....	22	120	35c.	.....
Dennis Claffey.....	704 Washington avenue.....	9	326	15c.	.....

METEOROLOGICAL OBSERVATIONS.

Latitude, 40° 41' North ; Longitude, 73° 57' West from Greenwich.

Height of Instrument above the sea, 220 feet.

METEOROLOGICAL TABLE No. 1.

*Table showing the observed height of the Barometer, monthly,
for the year ending December, 31 1885.*

MONTHS.	Mean at 7 A. M.	Mean at 2 P. M.	Mean at 9 P. M.	Monthly Mean.	Maximum.	Minimum.	Range.
January.....	29.856	29.852	29.931	29.880	30.466	29.164	1.302
February.....	29.773	29.748	29.781	29.767	30.183	29.263	.920
March.....	29.843	29.817	29.855	29.838	30.159	29.394	.765
April.....	29.818	29.782	29.790	29.797	30.282	29.323	.959
May.....	29.711	29.692	29.700	29.701	30.007	29.453	.554
June.....	29.778	29.762	29.764	29.768	30.002	29.082	.920
July.....	29.740	29.727	29.752	29.740	29.970	29.551	.419
August.....	29.761	29.734	29.737	29.744	29.997	29.519	.478
September.....	29.844	29.824	29.855	29.841	30.097	29.405	.692
October.....	29.797	29.769	29.795	29.783	30.026	29.088	.938
November.....	29.771	29.729	29.758	29.753	30.082	29.150	.932
December.....	29.795	29.748	29.779	29.774	30.382	28.976	1.406

Annual mean at 7 A. M.....	29.807
Annual mean at 2 P. M.....	29.765
Annual mean at 9 P. M.....	29.791
Annual mean of 365 observations.....	29.788
Maximum, January 3.....	30.466
Minimum, December 5.....	28.976
Range.....	1.490

METEOROLOGICAL TABLE No. 2.

DRY.

Table showing the state of Thermometer, monthly, for the year ending December 31, 1885.

MONTHS.	Mean at 7 A. M.	Mean at 2 P. M.	Mean at 9 P. M.	Maximum.	Minimum.	Range.
January.....	29.20	34.35	29.20	60.	8.	52.
February.....	20.85	28.11	24.21	46.	2.	48.
March.....	26.52	35.68	31.43	58.	5.	53.
April.....	45.40	54.76	48.20	82.	38.5	43.5
May.....	55.08	62.83	55.68	83.	40.	43.
June.....	67.39	76.54	67.55	86.	55.	31.
July.....	74.76	82.16	74.24	97.	60.	37.
August.....	72.12	79.05	71.72	90.5	54.	36.5
September.....	62.46	71.49	64.01	84.	46.	38.
October.....	53.82	61.24	55.12	73.	37.	36.
November.....	42.47	49.16	44.52	68.	30.	38.
December.....	33.87	39.83	36.77	59.	16.	43.

Annual mean, dry, at 7 A. M.....	48.66
Annual mean, dry, at 2 P. M.....	56.27
Annual mean, dry, at 9 P. M.....	50.22
Annual mean, dry, of 365 observations.....	51.72
Maximum, dry, July 21.....	97.
Minimum, dry, February 11.....	— 02.
Range.....	99.

METEOROLOGICAL TABLE No. 3.

WET.

Table showing the state of Thermometer, monthly, for the year ending December 31, 1885.

MONTHS.	Mean at 7 A. M.	Mean at 2 P. M.	Mean at 9 P. M.	Maximum.	Minimum.	Range.
January.....	25.93	22.04	26.91	34.	8.	26.
February.....	17.79	24.78	21.39	44.	3.	47.
March.....	25.89	33.07	28.55	48.	2.5	45.5
April.....	41.84	50.29	44.01	73.	24.	49.
May.....	50.79	57.24	50.66	70.	30.	40.
June.....	61.65	68.87	59.71	75.	48.	27.
July.....	68.21	74.33	67.98	84.5	52.	32.5
August.....	66.89	72.00	67.24	80.	52.	28.
September.....	57.26	66.03	59.02	77.	41.	36.
October.....	49.74	56.31	51.28	67.	34.	33.
November.....	37.94	43.19	40.68	64.	28.	36.
December.....	30.60	36.12	33.21	51.	14.	37.

Annual mean, wet, at 7 A. M.....	44.54
Annual mean, wet, at 2 P. M.....	50.35
Annual mean, wet, at 9 P. M.....	45.89
Annual mean, wet, of 365 observations.....	46.93
Maximum, wet, July 21.....	84.5
Minimum, wet, February 11.....	— 3.
Range...	87.5

METEOROLOGICAL TABLE No. 4.

*Table showing the force of Vapor, monthly, for the year ending
December 31, 1885.*

Months.	Mean at 7 A. M.	Mean at 2 P. M.	Mean at 9 P. M.	Monthly Mean.
January.....	.114	.145	.123	.127
February.....	.072	.102	.088	.087
March.....	.114	.167	.133	.138
April.....	.231	.320	.241	.264
May.....	.326	.413	.316	.352
June.....	.486	.611	.417	.504
July.....	.615	.756	.611	.661
August.....	.601	.710	.616	.642
September.....	.409	.578	.446	.478
October.....	.316	.398	.340	.350
November.....	.186	.249	.205	.213
December.....	.137	.162	.151	.150

Force of Vapor, maximum..... 1.046
Force of Vapor, minimum..... .007
Range..... 1.039

METEOROLOGICAL TABLE No. 5.

*Table showing the relative humidity (saturation being 100),
monthly, for the year ending December 31, 1885.*

MONTHS.	Mean at 7 A. M.	Mean at 2 P. M.	Mean at 9 P. M.	Monthly. Mean.
January .....	.58	.63	.66	.62
February .....	.52	.59	.62	.58
March .....	.68	.74	.66	.69
April .....	.74	.73	.70	.72
May .....	.73	.69	.70	.71
June .....	.71	.66	.61	.66
July .....	.70	.68	.71	.70
August .....	.75	.71	.78	.75
September .....	.71	.73	.74	.73
October .....	.72	.72	.75	.73
November .....	.62	.67	.66	.65
December .....	.63	.63	.65	.64

Maximum	100.
Minimum	11.
Range	86.

METEOROLOGICAL TABLE No. 6.

*Table showing the duration and depth of rain, snow and prevailing winds, monthly, during the year ending
December 31, 1885.*

MONTHS.	Number of days on which it rained or snow fell.	RAIN DURATION.			Depth in Inches.	Total depth in inches.	FALL OF SNOW.		
		Days.	Hours.	Minutes			In inches.	Reduced to water in inches.	Prevailing winds.
January....	12	4	22	03	2.99	.....	6.25	.69	W.
February....	10	3	11	40	3.92	6.91	30 5	3.63	W.
March.....	11	2	11	40	.30	7.21	5.5	.52	W. & N. W.
April.....	11	2	21	24	2.18	9.39	.....	.....	W.
May.....	16	4	...	30	1.835	11.225	.....	.....	N. E. N. W. & S.
June.....	9	...	20	12	1.32	12.543	.....	.....	S. & W.
July.....	13	1	4	35	2.69	15.235	.....	.....	S. & W.
August....	15	2	16	35	5.15	20.385	.....	.....	S. E. & S. E.
September..	9	1	6	11	.63	21.015	.....	.....	W. & S.
October....	9	3	18	40	4.212	25.227	.....	.....	W. & S.
November..	10	3	23	15	3.68	28.907	.....	.....	N. & W.
December..	11	2	15	9	1.22	29.027	42.25	4.34	W. & N. W.

During the months of January, February, March and December, light snow flurries, showers of rain, hail and sleet, and in April, May, June, July, August, September, October and November, light showers of rain fell; all of which were of such a character as not to warrant a measurement.

Total rain in inches 29.027
 Total snow in inches (42.25 reduced to water)..... 4.34
 Total amount of moisture..... 33.367



